EXHIBIT 12

Approved by the IEEE-SA Board of Governors December 2009

IEEE-SA Standards Board Bylaws

The Institute of Electrical and Electronics Engineers, Inc. 3 Park Avenue, New York, NY 10016-5997, USA

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IEEE-SA Standards Board Bylaws

1. IEEE-SA Standards Board

The IEEE-SA Standards Board is established by the IEEE-SA Board of Governors according to clause 5.1 of the IEEE Standards Association Operations Manual. The details of its responsibilities beyond that specified in the IEEE Standards Association Operations Manual are stipulated by these bylaws, as supplemented by the IEEE-SA Standards Board Operations Manual.

The IEEE-SA Standards Board is responsible on an Institute-wide basis for

- a) Encouraging and coordinating the development of IEEE standards
- b) Reviewing all proposed IEEE standards to determine whether the proposed standards conform to the requirements established by the IEEE-SA Standards Board and whether consensus has been achieved for approval of the proposed standards

Matters of standards policy, financial oversight, new directions in standardization, and other standards-related activities in fields of interest to the Institute as stated in the *IEEE Constitution* are the responsibility of the IEEE-SA Board of Governors (BOG).

2. IEEE standards

2.1 Role of IEEE Standards

IEEE-SA develops and publishes standards that include but are not limited to definitions and terminology; methods of measurement and test; systems; products; technology; ratings structures; temperature limits and application guides; recommended practices; and safety. Rating and dimensional information included in an IEEE standard result from technical considerations. Rating information developed by other competent organizations may be included provided it is consistent with good engineering practice.

The approval and publication of an IEEE standard implies that the document represents a consensus of the parties who have participated in its development and review. Since every attempt is made to involve all interests in the activity, it can be presumed that the document represents a consensus of interests concerned with the scope of the standard. Consensus is established when, in the judgment of the IEEE-SA Standards Board, substantial agreement has been reached by directly and materially affected interest categories. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

2.2 Purpose of IEEE standardization

IEEE standards provide a common ground for communication in some specific area of electrotechnology. They also provide criteria for measuring the acceptable performance of equipment or materials pertinent to the field of electrotechnology.

The purpose of the review by the IEEE-SA Standards Board is to ensure that IEEE standards represent a consensus of interests from those that are materially affected by these standards and that proper procedures have been followed during the development of these standards.

An IEEE standard gives an authoritative reference that is kept up to date through review at least every five years by the Sponsor responsible for its preparation. Alternatively, IEEE standards may be stabilized. These standards are considered for continued stabilization through review at least every ten years.

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3. Governance

The policies, procedures, rules, and regulations by which the IEEE and IEEE-SA Standards Board activities are governed are embodied in six documents. The IEEE Certificate of Incorporation legally establishes the IEEE. The IEEE Constitution, which can be approved and amended only by the voting members of the IEEE, contains IEEE's fundamental objectives and organization. Implementation of the constitutional provisions, in specific organizational units and their policies, is contained in the IEEE Bylaws, which are approved and amended by the IEEE Board of Directors. The IEEE Policies contain more detailed statements of specific policies, objectives, and procedures that may be approved only by the IEEE Board of Directors. The IEEE Standards Association Operations Manual provides specific objectives and policies that relate to standards activities in the IEEE. The IEEE Standards Association Operations Manual is created and amended by the IEEE-SA BOG. The sixth document, the IEEE-SA Standards Board Bylaws, is published herewith. Its purpose is to provide specific policies that relate to the management and creation of approved IEEE standards. The IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE-SA Standards Board Bylaws are created and amended by the IEEE Bylaws are crea

The precedence of these documents should be remembered by all those engaged in IEEE management duties. The IEEE Bylaws shall not be in conflict with the New York Not-For-Profit Corporation Law, the IEEE Certificate of Incorporation, or the IEEE Constitution. The IEEE Policies must conform to the provisions of all of these documents. Accordingly, the IEEE Standards Association Operations Manual shall conform to and not conflict with the provisions of the IEEE governing documents cited above. The IEEE-SA Standards Board Bylaws shall conform to the policies of the IEEE Standards Association Operations Manual. Questions of procedure or interpretation shall be addressed to the Managing Director, Standards.

4. IEEE-SA Standards Board organization

4.1 Membership

As stated in the IEEE Standards Association Operations Manual, the IEEE-SA Standards Board shall consist of no fewer than 18 nor more than 26 voting members, who shall be of Member or higher grade of the IEEE and members of the IEEE Standards Association, including a chair, vice chair, and the most recent past chair available to serve. Voting members of the IEEE-SA Standards Board shall be appointed by the IEEE-SA BOG. In addition, a representative appointed by the IEEE Technical Activities Board (TAB) shall be a voting member. In addition, the IEEE-SA Standards Board may include nonvoting participants as described below:

- Liaison representatives to provide coordination and communication between the IEEE-SA Standards Board and other IEEE entities, as well as other organizations involved in standards activities.
- Members emeriti appointed for life by the IEEE-SA Standards Board and ratified by the IEEE-SA BOG based on long years of prior distinguished service on the IEEE Standards Board and its committees. Only those members emeriti currently named to this position as of 31 December 1997 shall serve on the IEEE-SA Standards Board.

4.1.1 Officers

- a) Chair: The Chair of the IEEE-SA Standards Board shall be appointed for a term of one year by the IEEE-SA BOG.
- b) Vice Chair: The Vice Chair of the IEEE-SA Standards Board shall be appointed by the IEEE-SA Standards Board from among the voting members for a term of one year
- c) Past Chair: The most recent Past Chair of the IEEE-SA Standards Board available to serve shall be an officer of the IEEE-SA Standards Board.
- d) Secretary: The Managing Director of Standards, a member of the IEEE staff as designated by the IEEE Executive Director, is the Secretary of the IEEE-SA Standards Board. The Secretary shall serve ex officio without vote.

4.1.2 Liaison representatives

The following persons serve as nonvoting (unless already voting members) liaison representatives to the IEEE-SA Standards Board and its standing committees to assist in coordinating standardization work with their respective organizations:

- The chair of each IEEE Standards Coordinating Committee (SCC) appointed by the IEEE-SA Standards Board.
- b) Representatives of IEEE Societies and Councils (and their Technical Committees), appointed by the Presidents or Chairs of these bodies. Sponsor Committees may also designate liaison representatives where committee standards activity indicates the need for representation.
- Liaison representatives designated by other major IEEE Boards.
- d) Such other liaison representatives as the IEEE-SA Standards Board may authorize.

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The responsibilities of the liaison representatives are given in the IEEE-SA Standards Board Operations Manual.

4.1.3 SCC Coordinator

The SCC Coordinator shall ensure oversight of the SCCs and shall facilitate the work of the SCCs. The SCC Coordinator shall be appointed by the Chair of the Standards Board for a term of one year.

4.1.4 Tenure

Members of the IEEE-SA Standards Board may serve up to three consecutive one-year terms, except that chairs of standing committees or members of the Administrative Committee may be appointed to additional terms to provide experience and continuity.

4.2 Standing committees of the IEEE-SA Standards Board

All members of the standing committees of the IEEE-SA Standards Board shall be members of the IEEE Standards Association, and shall act in accordance with IEEE Standards policies and procedures, *IEEE Policies* including, but not limited to, Section 9.8 on Conflict of Interest, and the IEEE Code of Ethics.

4.2.1 Procedures Committee (ProCom)

4.2.1.1 Scope

This committee shall be responsible for recommending to the IEEE-SA Standards Board improvements and changes in its bylaws, procedures, and manuals to promote efficient discharge of responsibilities by the IEEE-SA Standards Board and its committees.

4.2.1.2 Organization

This committee shall be comprised of at least six members. The chair and other members of the committee shall be members of the IEEE-SA Standards Board and shall be appointed by the Chair of the IEEE-SA Standards Board for a term of one year.

4.2.2 New Standards Committee (NesCom)

4.2.2.1 Scope

This committee shall be responsible for ensuring that proposed standards projects are within the scope and purpose of the IEEE, that standards projects are assigned to the proper Society or other organizational body, and that interested parties are appropriately represented in the development of IEEE standards. The committee shall examine Project Authorization Requests (PARs) and make recommendations to the IEEE-SA Standards Board regarding their approval.

4.2.2.2 Organization

This committee shall be comprised of at least 10 but not more than 15 IEEE members, at least four of whom, including the chair, shall be voting members of the IEEE-SA Standards Board. The chair and other members of the committee shall be appointed by the Chair of the IEEE-SA Standards Board for a term of one year. In making nominations, the nominations committee shall give consideration to attaining membership from various IEEE Technical Divisions.

IEEE-SA Standards Board members not appointed to NesCom may serve as ex officio members without voting privileges.

4.2.3 Standards Review Committee (RevCom)

4.2.3.1 Scope

This committee shall be responsible for reviewing proposals for the approval of new and revised standards and for the reaffirmation or withdrawal of existing standards to ensure that the proposals represent a consensus of the members of the official IEEE Sponsor balloting group. The committee shall routinely examine submittals to ensure that all applicable requirements of the IEEE-SA Standards Board Operations Manual have been met and make recommendations to the IEEE-SA Standards Board regarding their approval.

4.2.3.2 Organization

This committee shall be comprised of at least 12 but not more than 15 members, at least three of whom, including the chair, shall be voting members of the IEEE-SA Standards Board. The chair and other members of the committee shall be appointed by the Chair of the IEEE-SA Standards Board for a term of one year. In making nominations, the nominations committee shall give consideration to attaining membership from various IEEE Technical Divisions.

IEEE-SA Standards Board members not appointed to RevCom may serve as ex officio members without voting privileges.

4.2.4 Audit Committee (AudCom)

4.2.4.1 Scope

This committee shall provide oversight of the procedures used in the standards-development activities of IEEE Standards Sponsors as defined by 5.2.2 and review of the procedures used by the Accredited Standards Committees for whom the IEEE serves as (co-)secretariat.

4.2.4.2 Organization

This committee shall be comprised of at least five members. Five of the committee members, including the chair, shall be current or former members of the IEEE-SA Standards Board. The chair and other members of the committee shall be appointed by the Chair of the IEEE-SA Standards Board for a term of one year.

4.2.5 Patent Committee (PatCom)

4.2.5.1 Scope

This committee shall provide oversight for the use of any patents and patent information in IEEE standards. This committee shall review any patent information submitted to the IEEE Standards Department to determine conformity with patent procedures and guidelines.

4.2.5.2 Organization

This committee shall be comprised of at least four but not more than six voting members. A member of the IEEE Standards staff, as designated by the Managing Director of Standards Activities, shall be an ex officio, nonvoting member. The chair and additional voting members of the committee shall be voting members of the IEEE-SA Standards Board or the IEEE-SA Board of Governors and shall be appointed by the Chair of the IEEE-SA Standards Board for a term of one year.

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4.2.6 Administrative Committee (AdCom)

The Administrative Committee shall act for the IEEE-SA Standards Board between meetings and make recommendations to the IEEE-SA Standards Board for its disposition at regular meetings. AdCom shall comprise the officers of the IEEE-SA Standards Board, the chairs of each standing committee of the IEEE-SA Standards Board, and the SCC Coordinator. The Chair of the IEEE-SA Standards Board shall be the chair of AdCom.

4.3 Other committees and bodies

4.3.1 Standards Coordinating Committees (SCCs)

Proposed standards are normally developed in the technical committees of the IEEE Societies. There are occasions when the scope of a standards activity is too broad to be encompassed in a single Society, or a Society may find itself in a position where it is unable to carry out the work needed to meet an identified need. In such instances, the IEEE-SA Standards Board shall establish its own committees to perform the required functions. These committees shall be known as Standards Coordinating Committees (SCCs) and shall report to the IEEE-SA Standards Board

There shall be two types of SCCs. The first (type 1) shall serve as a forum for the exchange of information between and among standards-developing activities of the IEEE. (Opportunities for sharing information about standards projects, trends, and Society directions will serve to minimize duplication among programs and will enhance the content of standards of interest to more than one Society.)

This type of SCC shall not develop standards. If this type of SCC is to take on a standards-development role, it shall apply for SCC type 2 status (see subclause 4.3.2 of the *IEEE-SA Standards Board Operations Manual*).

The second type of SCC (type 2) shall act as Sponsor for individual standards projects, in addition to having the coordination responsibilities of a type 1 SCC. It shall meet all the requirements of IEEE sponsorship (including clause 5 of the IEEE-SA Standards Board Operations Manual).

For information on the formation of SCCs, see 4.3 in the *IEEE-SA Standards Board Operations Manual*. For information on the organization of SCCs, see 4.4 in the *IEEE-SA Standards Board Operations Manual*.

5. IEEE-SA Standards Board procedures and responsibilities

5.1 Transaction of business

Regular meetings of the IEEE-SA Standards Board shall be held quarterly, in accordance with a schedule approved at the first meeting of each year. Special meetings may be called, when deemed necessary, by the Chair or at the request of five members.

Unless otherwise provided in the *IEEE Certificate of Incorporation*, the *IEEE Constitution*, the *IEEE Bylanes*, or the New York Not-For-Profit Corporation Law, the vote of a majority of the voting members of the IEEE-SA Standards Board present at the time of the vote, if a quorum is present at such a time, shall be the act of the IEEE-SA Standards Board.

Approval of proposed IEEE standards, or proposed withdrawal of such standards, shall require affirmative votes by at least 75% of the voting members present at the time of the vote, if a quorum is present. Except as otherwise specified in these bylaws, meetings of the IEEE-SA Standards Board shall be run in accordance with the parliamentary procedures of *Robert's Rules of Order* (latest edition).

5.2 Standards-development process

5.2.1 Participation in IEEE standards development

Participants in the IEEE standards development individual process shall act based on their qualifications and experience. Entity representative participants in the IEEE standards development entity process are appointed by an entity to represent that entity and act on its behalf. Such representatives may participate in IEEE standards development activities and take action based upon instruction from the entity for which they have been appointed as an entity representative.

While participating in IEEE standards development activities, all participants, including but not limited to, individuals, entity representatives, entity members, entities participating directly in the entity process, and entities participating indirectly in the individual process shall act in accordance with all applicable laws (nation-based and international), the IEEE Code of Ethics, and with IEEE Standards policies and procedures. Participants in IEEE standards development who are authenticated into any IEEE-SA database shall acknowledge the Obligations for Participation and Code of Ethics.

Participants on standards committees or working groups with governance authority or the authority to enter into a financial transaction with another party shall also act in accordance with *IEEE Policies* Section 9.8 on Conflict of Interest.

IEEE Standards Sponsor chairs and Sponsor liaison representatives shall be members of IEEE-SA and shall also be either IEEE members of any grade or IEEE affiliates.

The IEEE-SA shall maintain the authoritative database of participants in the development of standards. Such database shall be maintained by the Secretary of the IEEE-SA Standards Board.

5.2.1.1 Membership requirements for standards developed under the individual method

Chairs of IEEE standards working groups developing standards under the individual method shall be members of IEEE-SA and shall also be either IEEE members of any grade or IEEE affiliates. Designees (those designated to manage the Sponsor ballot) in the IEEE Standards Sponsor individual ballot process shall be members of IEEE-SA and shall also be either IEEE members of any grade or IEEE affiliates.

5.2.1.2 Membership requirements for standards developed under the entity method

Chairs of IEEE standards working groups developing standards under the entity method shall be representatives of entity IEEE-SA members. Designees (those designated to manage the Sponsor ballot) in the IEEE Standards Sponsor entity ballot process shall be representatives of entity IEEE-SA members

Every entity observing a project within an IEEE-SA entity standards working group is required to be an Entity Member of the IEEE-SA, and only Advanced Entity Members can contribute and hold voting privileges. Entity nonmembers may observe at one IEEE-SA entity standards working group meeting per project.

Each entity project shall have at least three voting participants in good standing to maintain its validity.

5.2.1.3 Dominance

The standards development process shall not be dominated by any single interest category, individual, or organization.

Dominance is normally defined as the exercise of authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints. Dominance can also be defined as the exercise of authority, leadership, or influence by reason of sufficient leverage, strength, or representation to hinder the progress of the standards development activity. Such dominance is contrary to open and fair participation by all interested parties and is unacceptable.

If evidence of dominance exists, corrective action shall be initiated. If the Sponsor's official P&P contain corrective action(s), the Sponsor shall implement such action(s) and promptly notify the IEEE-SA Standards Board. If the Sponsor's official P&P do not contain corrective actions, the Sponsor shall initiate corrective action(s), but only after such action(s) have been approved by the IEEE-SA Standards Board.

In the absence of effective corrective action(s) by the Sponsor, the IEEE-SA Standards Board shall implement either the corrective action specified in 5.2.1.3.1 or, at its discretion, an alternative corrective action [e.g., withdrawal of the PAR, limiting the number of voting members, one vote per organization, etc.]. The IEEE-SA Standards Board may impose further corrective action(s) if previous corrective action(s) prove to be insufficient.

5.2.1.3.1 Default corrective action

Fees for committee voting membership

The IEEE-SA Standards Board shall instruct the Sponsor to implement an organization fee for any individual wishing to maintain voting rights in the standards development committee. Frequency of collection and duration of voting rights covered by collected fees shall be decided by the IEEE-SA Standards Board, which shall work in conjunction with the Sponsor. An individual's status as representing an organization shall be based on self-disclosure of affiliation in compliance with the IEEE-SA policy on Disclosure of Affiliation and on other information that may be available to the IEEE-SA Standards Board and the Sponsor.

All fees collected shall be forwarded to the IEEE Standards Association and are non-refundable.

This corrective action shall remain in force until withdrawn or amended by the IEEE-SA Standards Board.

5.2.1.4 Openness

Openness is defined as the quality of being not restricted to a particular type or category of participants. All meetings involving standards development shall be open to all interested parties.

5.2.1.5 Disclosure of affiliation

Every member and participant in a working group, Sponsor ballot, or other standards development activity shall disclose his or her affiliation. An individual is deemed "affiliated" with any individual or entity that has been, or will be, financially or materially supporting that individual's participation in a particular IEEE standards activity. This includes, but is not limited to, his or her employer and any individual or entity that has or will have, either directly or indirectly, requested, paid for, or otherwise sponsored his or her participation. Failure to disclose every such affiliation may result in complete or partial loss of rights to participate in IEEE-SA activities. An individual is not excused from compliance with this policy by reason of any claim of a conflicting obligation (whether contractual or otherwise) that prohibits disclosure of affiliation.

A person who believes that a participant's disclosure is materially incomplete or incorrect should report that fact to the Secretary of the IEEE-SA Standards Board and the appropriate Sponsor(s).

5.2.2 Sponsor

A Sponsor shall be made up of any of the categories of membership described in IEEE Bylaw I-403. This Sponsor shall have a professed interest in the development of standards (either by direct participation or by the process of review) in technological areas that fall under the general scope of interest to the IEEE.

All IEEE standards development shall be based on projects that have been approved by the IEEE-SA Standards Board, and each project shall be the responsibility of a Sponsor. Sponsors of IEEE standards projects are committees that are responsible for the development and coordination of the standards project and the maintenance of the standard after approval of the standard by the IEEE-SA Standards Board.

The Sponsor shall be one of the following:

- a) A Technical Committee within an IEEE Society/Council
- b) A Standards Committee or Standards Coordinating Committee of an IEEE Society/Council
- c) A Standards Coordinating Committee established by the IEEE-SA Standards Board
- d) A Standards Subcommittee organized by or reporting to one of the above
- Other organizations as recommended by the IEEE-SA Standards Board and approved by the IEEE-SA BOG

The IEEE-SA Standards Board is not a Sponsor, but provides oversight and guidance to assist Sponsors when necessary.

5.2.2.1 Creation of Sponsors

Sponsors formed under rule (d) in 5.2.2 shall be officially recognized by the IEEE-SA Standards Board only after a 75% approval by the creating committee. Once formed, Sponsors automatically assume duties according to 5.1 of the *IEEE-SA Standards Board Operations Manual*.

5.2.2.2 Sponsor responsibility/accountability

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The Sponsor accepts responsibility for oversight of any of its assigned standards, including overseeing coordination and balloting.

When the breadth of interest in a standard is great enough so that more than one technical committee wishes to have a role in its sponsorship, a joint committee of the two or more interested committees may be formed to sponsor the standard jointly. That joint committee, whose membership shall be determined by mutual agreement, shall assume all of the duties of the Sponsor (see 5.1.2 of the IEEE-SA Standards Board Operations Manual).

Changes in sponsorship of projects shall be approved by the IEEE-SA Standards Board.

5.2.2.3 Sponsor balloting group

Potential dominance in Sponsor ballots as evidenced by an unduly high proportion of individuals employed by or affiliated with a single entity or from a particular balloting classification is unacceptable, counter to open and fair participation by all interested parties, and deprecated by the IEEE-SA Standards Board. All individuals joining a ballot group shall declare their employer and affiliation (see subclause 5.3.3.1 of the IEEE-SA Standards Board Operations Manual). The Sponsor shall review the ballot group for balance and possible dominance. If it is determined that the ballot group may be dominated (see 5.2.1.3), the Sponsor shall recommend remedial actions to the IEEE-SA Standards Board to ensure a fair and open ballot. The IEEE-SA Standards Board may also take action independent of any Sponsor recommendation.

The balloting group shall consist of persons who are members of the IEEE-SA and non-IEEE-SA members. A person is an individual or entity. An entity can be any for-profit or not-for-profit enterprise, as defined in IEEE Bylaw I-403. In addition, with the approval of the IEEE-SA Standards Board, invited individual experts who are non-IEEE-SA members may participate in ballots of proposed IEEE standards.

A single type of balloting group for a standard, based on the type of sponsorship, shall be established at the time of PAR approval and officially approved prior to the formation of a balloting group. A statement of the type of balloting membership to be used shall be included in all versions of the draft standard and the final approved standard.

5.2.3 Project authorization

In order to avoid duplication, provide for effective management of overall efforts, and expedite approval of final documents, all requests for an initiation of a standards project, in the form of a PAR, shall be approved by the IEEE-SA Standards Board. The IEEE-SA Standards Board has assigned to NesCom the preliminary review of PARs and the responsibility for recommending final approval to the Board.

Sponsors are required to submit a PAR at the earliest opportunity when a standards project is contemplated or work is started. The Secretary of the IEEE-SA Standards Board shall submit PARs to NesCom for approval in accordance with its procedures. Unless specifically authorized by the IEEE-SA Standards Board, no proposed standard or revision shall be considered by RevCom without prior approval of the project by the IEEE-SA Standards Board. The lifetime of a PAR shall be four years.

5.2.4 Final review and approval to publish

All IEEE standards shall be approved by the IEEE-SA Standards Board prior to publication. The IEEE-SA Standards Board has assigned to RevCom the review of standards submittals and the responsibility for recommending final approval to the IEEE-SA Standards Board. Approval by the IEEE-SA Standards Board indicates that the requirements of the IEEE-SA Standards Board Operations Manual and these bylaws have been satisfied and, specifically, that the final results of the ballot and statements submitted by other coordinating bodies who participated in the development of the standard indicate that consensus has been

achieved and unresolved negative ballots have been considered together with reasons why the comments could not be resolved.

5.2.5 Notification of action on standards

Following each meeting of the IEEE-SA Standards Board, the IEEE Standards Department shall issue a statement, available to all interested parties, which shall detail the actions taken at the last meeting of the IEEE-SA Standards Board on approval, reaffirmation, stabilization, and withdrawal of standards documents and authorization of new standards projects. This may be in the form of the minutes of the IEEE-SA Standards Board meeting.

5.3 Review cycles

All IEEE standards should be reviewed as often as new information is available or in accordance with the established cycle set by the IEEE-SA Standards Board, but no later than five years from the date of publication or, in the instance of stabilized standards, ten years from the initial approval or last revision or amendment. When an IEEE standard has been in effect for four years, the Secretary of the IEEE-SA Standards Board shall notify the standards liaison representative of the Sponsor that the standard must be reviewed for a maintenance action within the next year. The entire document shall be reviewed; amendments cannot be substituted for the five-year review.

The Sponsor has the option of

- a) Reaffirmation
- b) Revision
- c) Withdrawal
- d) Stabilization

5.4 Appeals

Persons who have directly and materially affected interests and who have been, or could reasonably be expected to be, adversely affected by a standard within the IEEE's jurisdiction, or by the lack of action in any part of the IEEE standardization process, shall have the right to appeal procedural actions or inactions, provided that the appellant shall have first exhausted the appeals procedures of any relevant subordinate committee or body before filing an appeal with the IEEE-SA Standards Board.

All technical decisions shall be made at or below the Sponsor level and the IEEE-SA Standards Board shall not consider appeals of technical decisions based on technical grounds. Any person dissatisfied with a technical decision shall follow the procedures of the body that has made the decision and that body's Sponsor, including, but not limited to, making a technical comment during the applicable comment submission period.

The IEEE-SA Standards Board shall not consider any claim that is either based solely on ethical considerations or that does not seek to amend or reverse a decision of a lower body relating to the development or approval of a standard. The appellant shall be advised to bring such claims to the attention of the IEEE Ethics and Member Conduct Committee or the IEEE-SA Standards Conduct Committee, as appropriate.

Further instructions concerning appeals procedure can be found in subclause 5.8 of the *IEEE-SA Standards Board Operations Manual*.

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5.5 Interpretations

While it is always the intent of standards-developing committees to use language that is so clear that it is unnecessary to explain or amplify the original intent of the committee, occasionally questions arise regarding the meaning of portions of standards as they relate to specific applications.

Questions relating to such interpretations require review and evaluation by a balance of committee interests. No single officer or member of an IEEE Sponsor or subgroup thereof shall provide a written or verbal opinion concerning any portion of the text of an IEEE standards document or an American National Standard developed under IEEE secretariat, unless that opinion has first been subjected to consideration by an interpretations subgroup that represents all interested parties on the committee. The actions to be taken shall be as specified in subclause 5.9 of the IEEE-SA Standards Board Operations Manual.

6. Patents

6.1 Definitions

The following terms, when capitalized, have the following meanings:

"Accepted Letter of Assurance" and "Accepted LOA" shall mean a Letter of Assurance that the IEEE-SA has determined is complete in all material respects and has been posted to the IEEE-SA web site.

"Affiliate" shall mean an entity that directly or indirectly, through one or more intermedianies, controls the Submitter, is controlled by the Submitter, or is under common control with the Submitter. For the purposes of this definition, the term "control" and its derivatives, with respect to for-profit entities, means the legal, beneficial or equitable ownership, directly or indirectly, of more than fifty percent (50%) of the capital stock (or other ownership interest, if not a corporation) of an entity ordinarily having voting rights. "Control" and its derivatives, with respect to nonprofit entities, means the power to elect or appoint more than fifty percent (50%) of the Board of Directors of an entity.

"Blanket Letter of Assurance" shall mean a Letter of Assurance that applies to all Essential Patent Claims for which a Submitter may currently or in the future (except as otherwise provided for in these Bylaws and in the IEEE-SA Standards Board Operations Manual) have the ability to license.

"Enabling Technology" shall mean any technology that may be necessary to make or use any product or portion thereof that complies with the [Proposed] IEEE Standard but is neither explicitly required by nor expressly set forth in the [Proposed] IEEE Standard (e.g., semiconductor manufacturing technology, compiler technology, object-oriented technology, basic operating system technology, and the like).

"Essential Patent Claim" shall mean any Patent Claim the use of which was necessary to create a compliant implementation of either mandatory or optional portions of the normative clauses of the [Proposed] IEEE Standard when, at the time of the [Proposed] IEEE Standard's approval, there was no commercially and technically feasible non-infringing alternative. An Essential Patent Claim does not include any Patent Claim that was essential only for Enabling Technology or any claim other than that set forth above even if contained in the same patent as the Essential Patent Claim.

"Letter of Assurance" and "LOA" shall mean a document, including any attachments, stating the Submitter's position regarding ownership, enforcement, or licensing of Essential Patent Claims for a specifically referenced IEEE Standard, submitted in a form acceptable to the IEEE-SA.

"Patent Claim(s)" shall mean one or more claims in issued patent(s) or pending patent application(s).

"Reasonable and Good Faith Inquiry" includes, but is not limited to, a Submitter using reasonable efforts to identify and contact those individuals who are from, employed by, or otherwise represent the Submitter and who are known to the Submitter to be current or past participants in the development process of the [Proposed] IEEE Standard identified in a Letter of Assurance, including, but not limited to, participation in a Sponsor Ballot or Working Group. If the Submitter did not or does not have any participants, then a Reasonable and Good Faith Inquiry may include, but is not limited to, the Submitter using reasonable efforts to contact individuals who are from, employed by, or represent the Submitter and who the Submitter believes are most likely to have knowledge about the technology covered by the [Proposed] IEEE Standard.

"Statement of Encumbrance" shall mean a specific reference to an Accepted LOA or a general statement in the transfer or assignment agreement that the Patent Claim(s) being transferred or assigned are subject to any encumbrances that may exist as of the effective date of such agreement. An Accepted LOA is an encumbrance.

"Submitter" when used in reference to a Letter of Assurance shall mean an individual or an organization that provides a completed Letter of Assurance. A Submitter may or may not hold Essential Patent Claims.

6.2 Policy

IEEE standards may be drafted in terms that include the use of Essential Patent Claims. If the IEEE receives notice that a [Proposed] IEEE Standard may require the use of a potential Essential Patent Claim, the IEEE shall request licensing assurance, on the IEEE Standards Board approved Letter of Assurance form, from the patent holder or patent applicant. The IEEE shall request this assurance without coercion.

The Submitter of the Letter of Assurance may, after Reasonable and Good Faith Inquiry, indicate it is not aware of any Patent Claims that the Submitter may own, control, or have the ability to license that might be or become Essential Patent Claims. If the patent holder or patent applicant provides an assurance, it should do so as soon as reasonably feasible in the standards development process once the PAR is approved by the IEEE-SA Standards Board. This assurance shall be provided prior to the Standards Board's approval of the standard. This assurance shall be provided prior to a reaffirmation/stabilization if the IEEE receives notice of a potential Essential Patent Claim after the standard's approval or a prior reaffirmation/stabilization. An asserted potential Essential Patent Claim for which an assurance cannot be obtained (e.g., a Letter of Assurance is not provided or the Letter of Assurance indicates that assurance is not being provided) shall be referred to the Patent Committee.

A Letter of Assurance shall be either:

- a) A general disclaimer to the effect that the Submitter without conditions will not enforce any present or future Essential Patent Claims against any person or entity making, using, selling, offering to sell, importing, distributing, or implementing a compliant implementation of the standard; or
- b) A statement that a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination. At its sole option, the Submitter may provide with its assurance any of the following: (i) a not-to-exceed license fee or rate commitment, (ii) a sample license agreement, or (iii) one or more material licensing terms.

Copies of an Accepted LOA may be provided to the working group, but shall not be discussed, at any standards working group meeting.

The Submitter and all Affiliates (other than those Affiliates excluded in a Letter of Assurance) shall not assign or otherwise transfer any rights in any Essential Patent Claims that are the subject of such Letter of Assurance that they hold, control, or have the ability to license with the intent of circumventing or negating any of the representations and commitments made in such Letter of Assurance.

The Submitter of a Letter of Assurance shall agree (a) to provide notice of a Letter of Assurance either through a Statement of Encumbrance or by binding any assignee or transferee to the terms of such Letter of Assurance; and (b) to require its assignee or transferee to (i) agree to similarly provide such notice and (ii) to bind its assignees or transferees to agree to provide such notice as described in (a) and (b).

This assurance shall apply to the Submitter and its Affiliates except those Affiliates the Submitter specifically excludes on the relevant Letter of Assurance.

If, after providing a Letter of Assurance to the IEEE, the Submitter becomes aware of additional Patent Claim(s) not already covered by an existing Letter of Assurance that are owned, controlled, or licensable by

the Submitter that may be or become Essential Patent Claim(s) for the same IEEE Standard but are not the subject of an existing Letter of Assurance, then such Submitter shall submit a Letter of Assurance stating its position regarding enforcement or licensing of such Patent Claims. For the purposes of this commitment, the Submitter is deemed to be aware if any of the following individuals who are from, employed by, or otherwise represent the Submitter have personal knowledge of additional potential Essential Patent Claims, owned or controlled by the Submitter, related to a [Proposed] IEEE Standard and not already the subject of a previously submitted Letter of Assurance. (a) past or present participants in the development of the [Proposed] IEEE Standard, or (b) the individual executing the previously submitted Letter of Assurance.

The assurance is irrevocable once submitted and accepted and shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal.

The IEEE is not responsible for identifying Essential Patent Claims for which a license may be required, for conducting inquiries into the legal validity or scope of those Patent Claims, or for determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory.

Nothing in this policy shall be interpreted as giving rise to a duty to conduct a patent search. No license is implied by the submission of a Letter of Assurance.

In order for IEEE's patent policy to function efficiently, individuals participating in the standards development process: (a) shall inform the IEEE (or cause the IEEE to be informed) of the holder of any potential Essential Patent Claims of which they are personally aware and that are not already the subject of an existing Letter of Assurance, owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents; and (b) should inform the IEEE (or cause the IEEE to be informed) of any other holders of such potential Essential Patent Claims that are not already the subject of an existing Letter of Assurance.

7. Copyright

All contributions to IEEE standards development (whether for an individual or entity standard) shall meet the requirements outlined in this clause.

7.1 Definitions

The following terms, when capitalized, have the following meanings:

"Public Domain" shall mean material that is no longer under copyright protection or did not meet the requirements for copyright protection.

"Published" shall mean material for which a claim of copyright is apparent (e.g., the presence of the copyright symbol ©; an explicit statement of copyright ownership or intellectual property rights, stated permission to use text; a text reference that indicates the insertion of text excerpted from a copyrighted work; or a visual indication of an excerpt from another work, such as indented text).

"Work Product" shall mean the compilation of or collective work of all participants (e.g., a draft standard; the final approved standard).

7.2 Policy

The IEEE owns the copyright in all Work Products.

Participants are solely responsible for determining whether disclosure of any contributions that they submit to the IEEE requires the prior consent of other parties and, if so, to obtain it.

7.2.1 Contributions from previously Published sources

All contributions from previously Published sources that are not Public Domain shall be accompanied by a Copyright Permission Form that is completed by the copyright owner, or by a person with the authority or right to grant copyright permission. The Copyright Permission Form shall outline the specific material being used and the planned context for its usage in the IEEE standard.

7.2.2 Contributions not previously Published

For any contribution that has not been previously Published, and that is not Public Domain:

- a) The IEEE has the non-exclusive, irrevocable, royalty-free, worldwide rights (i.e., a license) to use the contribution in connection with the standards project for which the contribution was made.
- b) Upon approval of the standard, the IEEE has the right to exploit and grant permission to use the standard's content derived from the contribution in any format or media without restriction.

Copyright ownership of the original contribution is not transferred or assigned to the IEEE.

8. Modifications to the IEEE-SA Standards Board Bylaws

Proposed modifications to these bylaws may be submitted to the IEEE-SA Standards Board Procedures Committee (ProCom) for its consideration. Proposed modifications that have been agreed to by ProCom shall be submitted to the IEEE-SA Standards Board for recommendation to forward to the IEEE-SA BOG for approval (see clause 5.1 of the IEEE Standards Association Operations Manual).

Modifications to these bylaws and the reasons therefor shall be mailed to all members of the IEEE-SA Standards Board at least 30 days before the IEEE-SA Standards Board meeting where the vote on these modifications shall be taken. Two-thirds of the voting Board members present at the meeting shall be required to approve any modifications.

These bylaws shall be reviewed by legal counsel.

8.1 Interpretations of the IEEE-SA Standards Board Bylaws

Requests for interpretations of this document shall be directed to the Secretary of the IEEE-SA Standards Board. The Secretary of the Board shall respond to the request within 30 days of receipt. Such response shall indicate a specified time limit when such an interpretation will be forthcoming. The time limit shall be no longer than is reasonable to allow consideration of and recommendations on the issue by, for example, the Procedures Committee of the IEEE-SA Standards Board. The interpretation shall be delivered by the Chair of the Procedures Committee after committee discussion provided that at least 75% of the committee agrees. The IEEE-SA Standards Board shall be notified of these results. If less than 75% of the committee agrees, or if any single committee member requests, the issue shall be deferred to the next regularly scheduled IEEE-SA Standards Board meeting for the full Board to decide.

EXHIBIT 13

Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC

(1 March 2007)

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Part I – Common guidelines

1 Purpose

ITU, in its Telecommunication Standardization Sector (ITU-T) and its Radiocommunication Sector (ITU-R), ISO and IEC have had patent policies for many years, the purpose being to provide in simple words practical guidance to the participants in their Technical Bodies in case patent rights matters arise.

Considering that the technical experts are normally not familiar with the complex issue of patent law, the Common Patent Policy for ITU-T/ITU-R/ISO/IEC (hereafter referred to as the "Patent Policy") was drafted in its operative part as a checklist, covering the three different cases which may arise if a Recommendation | Deliverable requires licences for Patents to be practiced or implemented, fully or partly.

The Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC (hereafter referred to as the "Guidelines") are intended to clarify and facilitate implementation of the Patent Policy, a copy of which can be found in Annex 1 and also on the web site of each Organization.

The Patent Policy encourages the early disclosure and identification of Patents that may relate to Recommendations | Deliverables under development. In doing so, greater efficiency in standards development is possible and potential patent rights problems can be avoided.

The Organizations should not be involved in evaluating patent relevance or essentiality with regards to Recommendations | Deliverables, interfere with licensing negotiations, or engage in settling disputes on Patents; this should be left - as in the past - to the parties concerned.

Organization-specific provisions are contained in Part II of this document. However, it is understood that those Organization-specific provisions shall contradict neither the Patent Policy nor the Guidelines.

2 Explanation of terms

Contribution: Any document submitted for consideration by a Technical Body.

Free of charge: The words "free of charge" do not mean that the Patent Holder is waiving all of its rights with respect to the essential patent. Rather, "free of charge" refers to the issue of monetary compensation; i.e., that the Patent Holder will not seek any monetary compensation as part of the licensing arrangement (whether such compensation is called a royalty, a one-time licensing fee. etc.). However, while the Patent Holder in this situation is committing to not charging any monetary amount, the Patent Holder is still entitled to require that the implementer of the above document sign a license agreement that contains other reasonable terms and conditions such as those relating to governing law, field of use, reciprocity, warranties, etc.

Organizations: ITU, ISO and IEC.

Patents: Patents refer to essential patents or similar rights, utility models and other statutory rights based on inventions, including any applications for any of the foregoing.

Patent Holder: Person or entity that owns, controls and/or has the ability to license Patents.

Reciprocity: As used herein, the word "reciprocity" means that the Patent Holder shall only be required to license any prospective licensee if such prospective licensee will commit to license its essential patent(s) or essential patent claim(s) for implementation of the same above document free of charge or under reasonable terms and conditions.

Recommendations | Deliverables: ITU-T and ITU-R Recommendations are referred to as "Recommendations", ISO deliverables and IEC deliverables are referred to as "Deliverables". The various types of Recommendation(s) | Deliverable(s) are referred to as "Document types" in the Patent Statement and Licensing Declaration Form (hereafter referred to as "Declaration Form") attached as Annex 2.

Technical Bodies: Study Groups, any subordinate groups and other groups of ITU-T and ITU-R and technical committees, subcommittees and working groups in ISO and IEC.

3 Patent disclosure

As mandated by the Patent Policy in its paragraph 1, any party participating in the work of the Organizations should, from the outset, draw their attention to any known pending patent application, either their own or of other organizations.

In this context, the words "from the outset" imply that such information should be disclosed as early as possible during the development of the Recommendation | Deliverable. This might not be possible when the first draft text appears since at this time, the text might be still too vague or subject to subsequent major modifications. Moreover, that information should be provided in good faith and on a best effort basis, but there is no requirement for patent searches.

In addition to the above, any party not participating in Technical Bodies may draw the attention of the Organizations to any known Patent, either their own and/or of any third-party.

When disclosing their own Patents, Patent Holders have to use the Patent Statement and Licensing Declaration Form (referred to as the "Declaration Form") as stated in Section 4 of these Guidelines.

Any communication drawing the attention to any third-party Patent should be addressed to the concerned Organization(s) in writing. The potential Patent Holder will then be requested by the relevant Organization(s) to submit a Declaration Form.

The Patent Policy and these Guidelines also apply to any Patent disclosed or drawn to the attention of the Organizations subsequent to the approval of a Recommendation | Deliverable.

Whether the identification of the Patent took place before or after the approval of the Recommendation | Deliverable, if the Patent Holder is unwilling to license under paragraph 2.1 or 2.2 of the Patent Policy, the Organizations will promptly advise the Technical Bodies responsible for the affected Recommendation | Deliverable so that appropriate action can be taken. Such action will include, but may not be limited to, a review of the Recommendation | Deliverable or its draft in order to remove the potential conflict or to further examine and clarify the technical considerations causing the conflict.

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4 Patent Statement and Licensing Declaration Form

4.1 The purpose of the Declaration Form

To provide clear information in the Patent Information databases of each Organization, Patent Holders have to use the Declaration Form, which is available on the web site of each Organization (the Declaration Form is included in Annex 2 for information purposes). They must be sent to the Organizations for the attention, for ITU, of the Directors of the TSB or the BR or, for ISO/IEC, of the CEOs. The purpose of the Declaration Form is to ensure a standardized submission to the respective Organizations of the declarations being made by Patent Holders and, most importantly, to require in the case of ITU, and to strongly desire in the case of ISO and IEC, supporting information and an explanation if a Patent Holder declares his/her unwillingness to license under option 1 or 2 of the Declaration Form (i.e., declares option 3 of the Declaration Form).

The Declaration Form gives Patent Holders the means of making a licensing declaration relative to rights in Patents required for implementation of a specific Recommendation | Deliverable. Specifically, by submitting this Declaration Form the submitting party declares its willingness/unwillingness to license, according to the Patent Policy, Patents held by it and whose licence would be required to practice or implement part(s) or all of a specific Recommendation | Deliverable.

The statement contained in the Declaration Form remains in force as long as it has not been replaced, e.g., in case of obvious errors.

Multiple Declaration Forms are appropriate if the Patent Holder has identified several Patents and classifies them in different options of the Declaration Form and/or if the Patent Holder classifies different claims of a complex patent in different options of the Declaration Form.

4.2 Contact information

In completing Declaration Forms, attention should be given to supplying contact information that will remain valid over time. Where possible, the "Name and Department" and e-mail address should be generic. Also it is preferable, where possible, that parties, particularly multinational organizations, indicate the same contact point on all Declaration Forms submitted.

With a view to maintaining up-to-date information in the Patent Information database of each Organization, it is requested that the Organizations be informed of any change or corrections to the Declaration Form submitted in the past, especially with regard to the contact person.

5 Conduct of meetings

Early disclosure of Patents contributes to the efficiency of the process by which Recommendations | Deliverables are established. Therefore, each Technical Body, in the course of the development of a proposed Recommendation | Deliverable, will request the disclosure of any known Patents essential to the proposed Recommendation | Deliverable.

Chairmen of Technical Bodies will, if appropriate, ask, at an appropriate time in each meeting, whether anyone has knowledge of Patents, the use of which may be required to practice or implement the Recommendation | Deliverable being considered. The fact that the question was asked shall be recorded in the meeting report, along with any affirmative responses.

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As long as the Organization concerned has received no indication of a Patent Holder selecting paragraph 2.3 of the Patent Policy, the Recommendation | Deliverable may be approved using the appropriate and respective rules of the Organization concerned. It is expected that discussions in Technical Bodies will include consideration of including patented material in a Recommendation | Deliverable, however the Technical Bodies may not take position regarding the essentiality, scope, validity or specific licensing terms of any claimed Patents.

6 Patent Information database

In order to facilitate both the standards-making process and the application of Recommendations | Deliverables, each Organization makes available to the public a Patent Information database composed of information that was communicated to the Organizations by the means of Declaration Forms. The Patent Information database may contain information on specific Patents, or may contain no such information but rather a statement about compliance with the Patent Policy for a particular Recommendation | Deliverable.

The Patent Information databases are not certified to be either accurate or complete, but only reflect the information that has been communicated to the Organizations. As such, the Patent Information databases may be viewed as simply raising a flag to alert users that they may wish to contact the entities who have communicated Declaration Forms to the Organizations in order to determine if patent licenses must be obtained for use or implementation of a particular Recommendation | Deliverable.

Part II – Organization-specific provisions

Specific provisions for ITU

ITU-1 General Patent Statement and Licensing Declaration Form

Anyone may submit a General Patent Statement and Licensing Declaration Form which is available on the web sites of ITU-T and ITU-R (the form in Annex 3 is included for information purposes). The purpose of this form is to give Patent Holders the voluntary option of making a general licensing declaration relative to material protected by Patents contained in any of their Contributions. Specifically, by submitting its form, the submitting party declares its willingness to license all Patents owned by it in case part(s) or all of any proposals contained in its Contributions submitted to the Organization are included in Recommendation(s) and the included part(s) contain items that have been patented or for which patent applications have been filed and whose licence would be required to practice or implement Recommendation(s).

The General Patent Statement and Licensing Declaration Form is not a replacement for the "individual" (see clause 4 of Part I) Declaration Form, which is made per Recommendation, but is expected to improve responsiveness and early disclosure of the Patent Holder's compliance with the Patent Policy.

The General Patent Statement and Licensing Declaration remains in force as long as it has not been replaced. It can be overruled by the "individual" (per Recommendation) Declaration Form from the same Patent Holder for any particular Recommendation (expectation is that this will rarely occur).

The ITU Patent Information database also contains a record of General Patent Statement and Licensing Declarations.

ITU-2 Notification

Text shall be added to the cover sheets of all new and revised ITU-T and ITU-R Recommendations, where appropriate, urging users to consult the ITU Patent Information database. The wording is:

"ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU [had/had not] received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the ITU Patent Information database."

Specific provisions for ISO and IEC

ISO/IEC-1 Consultations on draft Deliverables

All drafts submitted for comment shall include on the cover page the following text:

"Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation."

ISO/IEC-2 Notification

A published document for which no patent rights are identified during the preparation thereof, shall contain the following notice in the foreword:

"Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO [and/or] IEC shall not be held responsible for identifying any or all such patent rights."

A published document for which patent rights have been identified during the preparation thereof, shall include the following notice in the introduction:

"The International Organization for Standardization (ISO) [and/or] International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning (... subject matter...) given in (... subclause...).

ISO [and/or] IEC take[s] no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured the ISO [and/or] IEC that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ISO [and/or] IEC. Information may be obtained from:

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name of holder of patent right ...

address ...

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. ISO [and/or] IEC shall not be held responsible for identifying any or all such patent rights."

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ANNEX I

COMMON PATENT POLICY FOR ITU-T/ITU-R/ISO/IEC

The following is a "code of practice" regarding patents covering, in varying degrees, the subject matters of ITU-T Recommendations, ITU-R Recommendations, ISO deliverables and IEC deliverables (for the purpose of this document, ITU-T and ITU-R Recommendations are referred to as "Recommendations", ISO deliverables and IEC deliverables are referred to as "Deliverables"). The rules of the "code of practice" are simple and straightforward. Recommendations | Deliverables are drawn up by technical and not patent experts; thus, they may not necessarily be very familiar with the complex international legal situation of intellectual property rights such as patents, etc.

Recommendations | Deliverables are non-binding; their objective is to ensure compatibility of technologies and systems on a worldwide basis. To meet this objective, which is in the common interests of all those participating, it must be ensured that Recommendations | Deliverables, their applications, use, etc. are accessible to everybody.

It follows, therefore, that a patent embodied fully or partly in a Recommendation | Deliverable must be accessible to everybody without undue constraints. To meet this requirement in general is the sole objective of the code of practice. The detailed arrangements arising from patents (licensing, royalties, etc.) are left to the parties concerned, as these arrangements might differ from case to case.

This code of practice may be summarized as follows:

- The ITU Telecommunication Standardization Bureau (TSB), the ITU Radiocommunication Bureau (BR) and the offices of the CEOs of ISO and IEC are not in a position to give authoritative or comprehensive information about evidence, validity or scope of patents or similar rights, but it is desirable that the fullest available information should be disclosed. Therefore, any party participating in the work of ITU, ISO or IEC should, from the outset, draw the attention of the Director of ITU-TSB, the Director of ITU-BR, or the offices of the CEOs of ISO or IEC, respectively, to any known patent or to any known pending patent application, either their own or of other organizations, although ITU, ISO or IEC are unable to verify the validity of any such information.
- If a Recommendation | Deliverable is developed and such information as referred to in paragraph 1 has been disclosed, three different situations may arise:
- 2.1 The patent holder is willing to negotiate licences free of charge with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC.
- 2.2 The patent holder is willing to negotiate licences with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T/ITU-R/ISO/IEC.
- 2.3 The patent holder is not willing to comply with the provisions of either paragraph 2.1 or paragraph 2.2; in such case, the Recommendation | Deliverable shall not include provisions depending on the patent.

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Whatever case applies (2.1, 2.2 or 2.3), the patent holder has to provide a written statement to be filed at ITU-TSB, ITU-BR or the offices of the CEOs of ISO or IEC, respectively, using the appropriate "Patent Statement and Licensing Declaration" Form. This statement must not include additional provisions, conditions, or any other exclusion clauses in excess of what is provided for each case in the corresponding boxes of the form.

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ANNEX 2

PATENT STATEMENT AND LICENSING DECLARATION FORM FOR ITU-T/ITU-R RECOMMENDATION | ISO/IEC DELIVERABLE







Patent Statement and Licensing Declaration for ITU-T/ITU-R Recommendation | ISO/IEC Deliverable

This declaration does not represent an actual grant of a license

Please return to the relevant organization(s) as instructed below per document type:

Director Director Secretary-General General Secretary Telecommunication Radiocommunication Bureau International Organization for International Electrotechnical Standardization Bureau International Telecommunication Standardization Commission International Telecommunication 1 chemin de la Voie-Creuse 3 rue de Varembe Union Union Place des Nations CH-1211 Geneva 20 CH-1211 Geneva 20 Place des Nations CH-1211 Geneva 20, Switzerland Switzerland CH-1211 Geneva 20, Switzerland Fax: +41 22 733 3430 Fax: +41 22 919 0300 Switzerland Fax: +41 22 730 5785 Email; Email. Fax: +41 22 730 5853 Email: brmail@its.int inmail@icc.ch patent.statements@iso.org Email: tsbdir@itu.int

Patent Holder: Legal Name	
Contact for license application:	
Name &	
Department	
Address	
Tel.	 -
Fax	
E-mail	
URL (optional)	
Document type:	
ITU-T Rec. (*) ITU-R Rec. (*) ISO Deliv	rerable (*) IEC Deliverable (*)
(please return the form to the relevant Organization)	
Common text or twin text (ITU-T Rec. ISO/IEC Deliverable	le (*)) (for common text or twin text,
please return the form to each of the three Organizations: ITU-T, ISC	
ISO/IEC Deliverable (*) (for ISO/IEC Deliverables, please ret	um the form to both ISO and IEC)
(*)Number	
(*)Title	

Licensing declaration: The Patent Holder believes that it holds granted and/or pending applications for patents, the use of which would be required to implement the above document and hereby declares, in accordance with the Common Patent Policy for ITU-T/ITU-R/ISO/IEC, that (check one box only):		
1. The Patent Holder is prepared to grant a <u>free of charge</u> license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and under other reasonable terms and conditions to make, use, and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. Also mark here if the Patent Holder's willingness to license is conditioned on <u>reciprocity</u> for the above document.		
Also mark here if the Patent Holder reserves the right to license on reasonable terms and conditions (but not <u>free of charge</u>) to applicants who are only willing to license their patent claims, whose use would be required to implement the above document, on reasonable terms and conditions (but not free of charge).		
2. The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO, or IEC. Also mark here if the Patent Holder's willingness to license is conditioned on reciprocity for the above document.		
3. The Patent Holder is unwilling to grant licenses in accordance with provisions of either 1 or 2 above. In this case, the following information must be provided to ITU, and is strongly desired by ISO and IEC, as part of this declaration: - granted patent number or patent application number (if pending); - an indication of which portions of the above document are affected; - a description of the patent claims covering the above document.		
Free of charge: The words "free of charge" do not mean that the Patent Holder is waiving all of its rights with respect to the essential patent. Rather, "free of charge" refers to the issue of monetary compensation; <i>i.e.</i> , that the Patent Holder will not seek any monetary compensation as part of the licensing arrangement (whether such compensation is called a royalty, a one-time licensing fee, etc.). However, while the Patent Holder in this situation is committing to not charging any monetary amount, the Patent Holder is still entitled to require that the implementer of the above document sign a license agreement that contains other reasonable terms and conditions such as those relating to governing law, field of use, reciprocity, warranties, etc.		
<u>Reciprocity</u> : As used herein, the word "reciprocity" means that the Patent Holder shall only be required to license any prospective licensee if such prospective licensee will commit to license its essential patent(s) or essential patent claim(s) for implementation of the same above document free of charge or under reasonable terms and conditions.		
Signature: Patent Holder Name of authorized person Title of authorized person Signature Place, Date		

FORM: 1 March 2007

Pater	nt Information (desired l	but not required fo	r options 1 and 2; required in I	TU for option 3 (NOTE))
No.	Status	Country	Granted Patent Number	Title
	[granted/pending]		or Application Number (if pending)	
I				
2				
3				

NOTE: For option 3, the additional minimum information that shall also be provided is listed in the option 3 box above.

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ANNEX 3

GENERAL PATENT STATEMENT AND LICENSING DECLARATION FORM FOR ITU-T/ITU-R RECOMMENDATION

ITU
International Telecommunication Union

General Patent Statement and Licensing Declaration

for ITU-T/ITU-R Recommendation

This declaration does not represent an actual grant of a license

Please return to the relevant bureau:

Director
Telecommunication Standardization Bureau International Telecommunication Union Place des Nations
CH-1211 Geneva 20,
Switzerland
Fax: +41 22 730 5853
Email: tsbdir@itu.int

Director
Radiocommunication Bureau
International Telecommunication Union
Place des Nations
CH-1211 Geneva 20,
Switzerland
Fax: +41 22 730 5785

Email: brmail@itu.int

Patent Holder:	
Legal Name	_
Contact for license application:	
Name &	
Department	
Address	
Tel.	
Fax	
E-mail	
URL (optional)	

Licensing declaration:		
included for which Recomme	art(s) or all of any proposals contained in Contributions submitted by the Patent Holder above are in ITU-T/ITU-R Recommendation(s) and the included part(s) contain items that have been patented or a patent applications have been filed and whose use would be required to implement ITU-T/ITU-R endation(s), the above Patent Holder hereby declares, in accordance with the Common Patent Policy I/ITU-R/ISO/IEC (check one box only):	
	1. The Patent Holder is prepared to grant a <u>free of charge</u> license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and under other reasonable terms and conditions to make, use, and sell implementations of the relevant ITU-T/ITU-R Recommendation.	
	Negotiations are left to the parties concerned and are performed outside the ITU-T/ITU-R.	
	Also mark here if the Patent Holder's willingness to license is conditioned on <u>reciprocity</u> for the above ITU-T/ITU-R Recommendation.	
	Also mark hereif the Patent Holder reserves the right to license on reasonable terms and conditions (but not <u>free of charge</u>) to applicants who are only willing to license their patent claims, whose use would be required to implement the above ITU-T/ITU-R Recommendation, on reasonable terms and conditions (but not <u>free of charge</u>).	
	2. The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the relevant ITU-T/ITU-R Recommendation.	
	Negotiations are left to the parties concerned and are performed outside the ITU-T/ITU-R.	
	Also mark here if the Patent Holder's willingness to license is conditioned on <u>reciprocity</u> for the above ITU-T/ITU-R Recommendation.	
respect to the Paten compensa situation the imple	harge: The words "free of charge" do not mean that the Patent Holder is waiving all of its rights with the the essential patent. Rather, "free of charge" refers to the issue of monetary compensation; i.e., that the Holder will not seek any monetary compensation as part of the licensing arrangement (whether such ation is called a royalty, a one-time licensing fee, etc.). However, while the Patent Holder in this is committing to not charging any monetary amount, the Patent Holder is still entitled to require that menter of the ITU-T/ITU-R Recommendation sign a license agreement that contains other reasonable d conditions such as those relating to governing law, field of use, reciprocity, warranties, etc.	
license ar essential	ity: As used herein, the word "reciprocity" means that the Patent Holder shall only be required to my prospective licensee if such prospective licensee will commit to license its essential patent(s) or patent claim(s) for implementation of the same ITU-T/ITU-R Recommendation free of charge or isonable terms and conditions.	
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EXHIBIT 14



Understanding Patent Issues During IEEE Standards Development

Patented Technology in IEEE standards

This guide offers information concerning the IEEE Standards Association and its patent policies but does not state the patent policy. Definitive statements of the IEEE Standard Association's policies and procedures concerning patents can be found in the <u>IEEE-SA Standards Board Bylaws</u> and the <u>IEEE-SA Standards Board Operations Manual</u>.

A complete package of patent-related materials is available at http://standards.ieee.org/about/sasb/patcom/materials.html. This package includes all the documentation you need to comply with the IEEE Standards Association policy concerning essential patents. A flowchart with additional guidance on the methodologies used by the IEEE-SA Standards Board Patent Committee is part of this package. If you include patented technology in your standard, then you may have incorporated an essential patent.

1. What is an Essential Patent Claim?

An <u>Essential Patent Claim</u> means any <u>Patent Claim</u> [including claims in issued patent(s) or pending patent application(s)] the use of which was necessary to create a compliant implementation of either mandatory or optional portions of the normative clauses of the [Proposed] IEEE Standard when, at the time of the [Proposed] IEEE Standard's approval, there was no commercially and technically feasible non-infringing alternative. An Essential Patent Claim does not include any Patent Claim that was essential only for Enabling Technology or any claim other than that set forth above even if contained in the same patent as the Essential Patent Claim. See <u>clause 6.1</u> of the IEEE-SA Standards Board Bylaws at http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6.1.

2. Does the IEEE determine whether a patent is essential when seeking a Letter of Assurance?

N٥.

Call for Essential Patents Claims at IEEE Standards Developing Meetings

3. What is a call for patents?

IEEE Standards Association | 445 Hoes Lane | Piscataway NJ 08854 USA Phone: +1 732 981 0060 | Fax: +1 732 562 1571 | standards.ieee.org

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IEEE-SA Standards Board Patent Committee

A <u>call for patents</u> is a reminder made by the chair, or the chair's designee, at an IEEE standards developing meeting. The chair or the chair's designee informs the participants that if any individual believes that Patent Claims might be Essential Patent Claims, that fact should be made known to the entire working group and duly recorded in the minutes of the working group meeting.

4. How often should a Working Group Chair issue a call for potential Essential Patent Claims?

A Working Group Chair or his or her designee shall issue the call at every Working Group meeting. If the Working Group does not meet face to face or telephonically, the Working Group should be issued a call via e-mail or letter on a regular basis. It is strongly recommended that the IEEE Patent Committee-developed <u>slide set</u> be used. Note that a call for patents shall be made at every standards developing meeting. This includes, but is not limited to, working group and task force meetings.

4a. Should a Call for Patents be issued at a Study Group or other pre-PAR meeting?

No. However, it is recommended that the <u>`Patent Slides for pre-PAR Meetings'</u> be used in these meetings.

5. Our group gathers for several days during a single week. Does the chair have to announce the policy every day?

The Working Group Chair or his or her designee shall issue the call at every Working Group meeting. If a group is "meeting" for consecutive days and the attendance is substantially the same for each day of the gathering, the policy only needs to be read once. If the chair plans not to read or display the policy each day, then the chair must either (a) ensure that the policy or a <u>URL</u> for it has been sent out to all attendees prior to the meeting (and is available in the registration packet for any on-site registrants), or (b) announce each day that the meeting is subject to the patent policy as read or displayed on the first day. Note, though, that this rule applies separately to each "group" that is "meeting" during the week. For example, if a working group holds a meeting during the same week as its task group and/or task force, the chair of each of those groups must read or display the policy at the beginning of that group's first day of "meeting."

5a. How does the chair determine that the participation in a group that is 'meeting' for consecutive days is substantially the same?

The chair has to use his/her judgment to determine this. It could for example be done based on the attendance numbers each day. The default action is to read the patent policy.

6. What if a group meets telephonically?

If the Working Group meets telephonically, you can send the slides in an email to the participants in advance of the call, or include a <u>link</u> in the meeting announcement. The chair must then ask at the start of the call whether there is anybody participating that has not read the policy. If someone says they have not, then the chair must either (a) read the policy aloud, or (b) send the policy or <u>URL</u> electronically and pause the call until all participants have read the policy.

7. What if the group does not meet either in person or by telephone – for example, the group "meets" only through email or chat rooms?

If the group does not meet face-to-face or telephonically, the chair of the group should issue the <u>call for patents</u> via e-mail or letter on a regular basis.

Letter of Assurance

8. What is a Letter of Assurance?

In general, a letter of assurance is a document stating a <u>Submitter's</u> position with respect to ownership, enforcement, or licensing an <u>Essential Patent Claim</u> that may be incorporated into a specifically referenced IEEE Standard. The specific requirements for an IEEE <u>Letter of Assurance</u> are defined in clause 6.1 of the <u>IEEE-SA Standards Board Bylaws</u> at http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6.1.

9. When does the IEEE send out a request for a Letter of Assurance?

The Working Group Chair or, where appropriate, the Sponsor Chair will send out a request for a <u>Letter of Assurance</u> whenever the Chair is notified, at any time and by any means, that the [Proposed] IEEE Standard may require the use of a potential <u>Essential Patent Claim</u>.

10. How will a participant know if the IEEE has accepted a Letter of Assurance?

<u>Accepted Letters of Assurance</u> can be found on the IEEE-SA's web site at http://standards.ieee.org/about/sasb/patcom/patents.html.

11. What happens if the IEEE has not received assurances regarding all potential Essential Patent Claims incorporated in a [Proposed] IEEE Standard?

If the IEEE is aware of a potential <u>Essential Patent Claim</u> and no corresponding <u>Letter of Assurance</u> has been received, the matter will be referred to the <u>IEEE-SA Standards Board Patent Committee</u> through the <u>PatCom Administrator</u>. The IEEE-SA Standards Board Patent Committee will review the circumstances and make a recommendation to the IEEE-SA Standards Board.

12. How should Working Groups handle existing Letters of Assurance provided to IEEE when developing an amendment, corrigendum, edition, or revision of the particular standard referenced in the Letter of Assurance?

An <u>Accepted Letter of Assurance</u> referencing an existing standard, amendment, corrigendum, edition, or revision will remain in force for the application of the <u>Essential Patent Claim(s)</u> to the technology specified in another amendment, corrigendum, edition, or revision of the same IEEE Standard but only if (a) the application of the technology required by the amendment, corrigendum, edition, or revision of the same IEEE Standard has not changed from its previous usage and (b) the same Essential Patent Claims covered by the prior Accepted Letter of Assurance remain Essential Patent Claims in the same IEEE Standard or revision thereof. The Working Group Chair shall initiate a request for a new <u>Letter of Assurance</u> from a known <u>Submitter</u> when re-using portions of or technologies specified in an existing [Proposed] IEEE Standard, amendment, corrigendum, edition, or revision referenced in an Accepted Letter of Assurance in a different [Proposed] IEEE Standard.

12a. How should Working Groups handle Letters of Assurance when re-using portions of a non-IEEE standard in a [Proposed] IEEE Standard?

The Working Group Chair shall initiate a request for a <u>Letter of Assurance</u> from holders of potential <u>Essential Patent Claims</u> when re-using portions of an existing non-IEEE standard in a [Proposed] IEEE Standard. Any patent letters of assurance (or patent declarations) given to the developer of the non-IEEE standard cannot be stated to also apply to the [Proposed] IEEE Standard. In addition, there are specific requirements that must be incorporated into an IEEE Letter of Assurance in order for it to have the possibility of becoming an <u>Accepted IEEE Letter of Assurance</u>.

Participants and Notification to IEEE of Essential Patent Claims

13. What obligation do individual participants have to notify the IEEE if they own or their employer owns potential Essential Patent Claims incorporated in a [Proposed] IEEE Standard? What if they are uncertain whether a Patent Claim they own or their employer owns is essential?

Individual participants of a <u>call for patents</u> are required to notify the IEEE of the identity of a holder of any potential <u>Essential Patent Claims</u> (but not the identity of the Essential Patent Claim) where (1) the individual participant is personally aware that the holder may have a potential Essential Patent Claim; (2) the holder is the participant or an entity the participant is from, employed by, or otherwise represents; and (3) the potential Essential Patent Claim is not already the subject of any existing <u>Letter of Assurance</u>. If such a participant is uncertain whether the patent is essential, the participant still shall notify the IEEE (or cause the IEEE to be notified) of the possibility because they are personally aware of a claim that is a *potential* Essential Patent Claim.

13a. When is a potential Essential Patent Claim considered to be the subject of an existing Letter of Assurance?

A potential <u>Essential Patent Claim</u> is the subject of an existing <u>Letter of Assurance</u> for a particular standard (a) if there is an <u>Accepted Letter of Assurance</u> for the potential Essential Patent Claim or related potential Essential Patent, (b) if there is an Accepted <u>Blanket Letter of Assurance</u> from the holder of the potential Essential Patent Claim, or (c) an Accepted Letter of Assurance for the potential Essential Patent Claim exists under the conditions defined in IEEE-SA Standards Board Operations Manual <u>subclause 6.3.5</u> 'Applicability of Letters of Assurance to Amendments, Corrigenda, Editions, or Revisions' (see FAQ12).

14. How do I find out if a particular company has submitted a Letter of Assurance?

Accepted Letters of Assurance are listed on the IEEE-SA's web site at http://standards.ieee.org/about/sasb/patcom/patents.html. Letters of Assurance accepted after 31 December 2006 will be posted on the website as they are received and Letters of Assurance received prior to that date will be posted over time.

15. What are example means by which an individual participant can notify the IEEE (or cause the IEEE to be notified) that his or her employer is the holder of a potential Essential Patent Claim incorporated in a [Proposed] IEEE Standard? Does the individual participant need to identify the Essential Patent Claim specifically?

An individual participant could fulfill his or her duty to the IEEE by telling the Working Group Chair that his or her employer is the holder of a potential <u>Essential Patent Claim</u>. Alternatively, the participant could request that his or her employer submit a <u>Letter of Assurance</u> or otherwise notify the IEEE that it is the holder of a potential Essential Patent Claim. In the latter case, the participant fulfills his or her duty to the IEEE only if his or her employer submits

a Letter of Assurance or otherwise notifies the IEEE that it is the holder of a potential Essential Patent Claim. If the employer declines to submit a Letter of Assurance or otherwise notify the IEEE, the participant will have to tell the Working Group Chair that his or her employer may be the holder of a potential Essential Patent Claim. In all cases, the duty on the participant is only to inform the IEEE of the identity of the holder of a potential Essential Patent Claim and not the patent, application, or particular claim itself. The response to the call for patents only needs to be made if the response relates to a potential Essential Patent Claim that is not already the subject of any existing Letter of Assurance or request for a Letter of Assurance.

15a. Can a response to the call for patents be made via email in advance or subsequent to a meeting?

The duty on the participant is to inform the IEEE of the identity of the holder of a potential <u>Essential Patent Claim</u>. The Chair can be notified at any time (in advance or subsequent to a meeting is acceptable). The declaration must be made in a recordable manner.

16. Do participants have to notify IEEE of third party patent holders? For these purposes, "third party" means a person other than the participant or an entity the participant is from, employed by, or otherwise represents.

Participants are not required to notify the IEEE that they are aware of any potential <u>Essential Patent Claims</u> held by a third party. Participants may make such disclosure at their own discretion. Although there is no obligation to notify the IEEE of third party patent holders, the IEEE encourages participants to do so. This encouragement is particularly strong as the third party may not be a participant in the standards process.

17. What duty does an individual participant have to the IEEE if a participant's employer owns a potential Essential Patent Claim but the individual participant doesn't have personal knowledge of such claim?

As noted in the answer to question 13, a participant only needs to notify the IEEE of a potential <u>Essential Patent Claim</u> if such participant is "personally aware" that his or her employer has a potential Essential Patent Claim. There is no duty for that employee (or anyone else in his or her organization) to conduct a patent search, but the IEEE-SA does expect that participants will conduct themselves in good faith. This expectation arises both from the <u>IEEE Code of Ethics</u> and from the background legal rules. The IEEE Code of Ethics makes clear, for example, that participants "accept responsibility in making decisions consistent with the safety, health and welfare of the public." Similarly, the U.S. Supreme Court stated in the Allied Tube case that SDOs operate based on "the

merits of objective expert judgments" using "procedures that prevent the standard-setting process from being biased by members with economic interests in stifling product competition." Consequently, while (again) the policy does not require a patent search, the IEEE does encourage each participant to make sufficient inquiry to satisfy him or herself that s/he is not being deliberately shielded from relevant knowledge and that the employer does not have any potential Essential Patent Claim.

18. Can an individual participate in standards development activities if his or her employer is unwilling to submit a Letter of Assurance once requested or provide the assurance indicated in the patent policy in a Letter of Assurance?

Yes. As long as the participant complies with the requirement that he or she notify the IEEE that his or her employer is the holder of a potential <u>Essential Patent Claim</u> if the participant is personally aware that his or her employer is such a holder, the individual can continue to participate in standards development activities. See also question 15.

19. Does the IEEE patent policy require participants or their employers to make an assurance or submit a Letter of Assurance?

No. Submission of a <u>Letter of Assurance</u> is not a precondition to participation. Participants do have a duty to inform the IEEE if they or an entity they are from, employed by, or otherwise represents holds potential <u>Essential Patent Claims</u>. See questions 13, 16, and 18 for more information.

20. Is the IEEE's patent policy a "disclosure" policy?

No. The IEEE's patent policy is a policy of assurance as further described in these frequently asked questions, not a policy of disclosure.

- 21. What does a participant's employer need to do to determine whether it has any potential Essential Patent Claims when it receives a request from the IEEE for a Letter of Assurance? Specifically,
- (a) Does the employer need to do a patent search?

No. The policy expressly states that there is no duty to conduct a patent search; but the employer may do so if it wishes.

(b) Does the employer need to talk to every person they have sent to the Working Group?

When the employer receives the request for a <u>Letter of Assurance</u>, the employer can state its licensing position with respect to any Patent Claims that might be or become Essential Patent Claims relating to the particular standard referenced in the Letter of Assurance. In the alternative, the employer can indicate that it is not aware of any Patent Claims that the employer may own, control, or have the ability to license that might be or become Essential Patent Claims, but only if the employer does a Reasonable and Good Faith Inquiry to determine the existence of any such Patent Claims. As described in clause 6.1 of the Bylaws, a "Reasonable and Good Faith Inquiry" includes, but is not limited to, the employer using reasonable efforts to identify and contact those individuals who are from, employed by, or otherwise represent the employer and who are known to the employer to be current or past participants in the development process of the [Proposed] IEEE Standard identified in the Letter of Assurance, including, but not limited to, participation in a Sponsor Ballot or Working Group. If the Submitter did not or does not have any participants, then a "Reasonable and Good Faith Inquiry" may include, but is not limited to, the Submitter using reasonable efforts to contact individuals who are from, employed by, or represent the Submitter and who the Submitter believes are most likely to have knowledge about the technology covered by the [Proposed] IEEE Standard. As described above, the employer only needs to engage in a Reasonable and Good Faith Inquiry if it wants to avoid providing an assurance based on its assertion that it is not aware of any Patent Claims that the employer may own, control, or have the ability to license that might be or become Essential Patent Claims.

Submitting a Letter of Assurance

- 22. Do the terms "potential Essential Patent Claims" and "Patent Claims that the Submitter may own, control, or have the ability to license . . . " include claims described in patent applications?
 - Yes. The definition of <u>Patent Claims</u> includes pending patent applications.
- 23. At what point should the Letter of Assurance be submitted?
 - The IEEE encourages the submission of a <u>Letter of Assurance</u> as soon as reasonably feasible in the standards development process once the PAR has been approved by the IEEE-SA Standards Board.
- 24. Who should submit a Letter of Assurance?

The IEEE will request licensing assurance on the IEEE-SA Standards Board approved <u>Letter of Assurance form</u> from any person upon being notified that a [Proposed] IEEE Standard may require the use of a potential <u>Essential Patent Claim</u>. Although the IEEE encourages any person receiving a request for

assurance to submit the <u>Letter of Assurance</u>, the IEEE may not use any coercion in requesting the assurance. This means the IEEE cannot require that a person submit a Letter of Assurance or provide a particular assurance with respect to ownership, enforcement, or licensing of an Essential Patent Claim in order to participate in an IEEE standards development activity.

Additionally, a <u>Submitter</u> of a Letter of Assurance is required to submit a Letter of Assurance if, after providing a Letter of Assurance to the IEEE, the Submitter of the Letter of Assurance becomes aware of additional <u>Patent Claim(s)</u> not already covered by an existing Letter of Assurance as further described in the answer to question 26. Any person or entity that believes that it holds a potential Essential Patent Claim is encouraged to submit a Letter of Assurance, even if not specifically requested to do so.

25. Who should sign a Letter of Assurance?

Only a person who is authorized to sign and bind the <u>Submitter</u> and its covered <u>Affiliates</u> to the assurance shall sign the <u>Letter of Assurance</u>. Unless the Letter of Assurance is received from an individual who has clear authority for intellectual property and legal matters, the IEEE-SA Standards Board Patent Committee Administrator will take follow-up action.

26. What duty does a Submitter have to provide an additional assurance if it becomes aware of additional Essential Patent Claims not already covered by an existing Letter of Assurance?

As further described in Section 6.2 of the Bylaws, the Submitter of a Letter of Assurance is required to submit a Letter of Assurance if, after providing a Letter of Assurance to the IEEE, the Submitter of the Letter of Assurance becomes aware of additional Patent Claim(s) that are not already covered by an existing Letter of Assurance and that are owned, controlled, or licensable by the Submitter that may be or may become Essential Patent Claim(s) for the same IEEE Standard. The Submitter is deemed to be "aware" of such additional potential Essential Patent Claims if any of the following individuals who are from, employed by, or otherwise represent the Submitter have personal knowledge of such claims: (a) past or present participants in the development of the [Proposed] IEEE Standard; or (b) the individual executing the previously submitted Letter of Assurance.

- 27. Can the Letter of Assurance form be modified? No. Use of the Letter of Assurance form is now mandatory. Completing the form is not considered a modification.
- 28. What happens when a Letter of Assurance is not accepted?

The <u>Submitter</u> will be informed by the <u>PatCom Administrator</u> that the <u>Letter of Assurance</u> was not accepted and why it was not accepted.

29. Are attachments part of the Accepted Letter of Assurance?

Yes. See also question 38 and 39.

30. Who can enforce the Accepted Letter of Assurance?

Users and implementers may seek to enforce the terms of any <u>Accepted Letter of Assurance</u>. In certain circumstances and at its sole discretion, the IEEE may also seek to enforce the terms of an Accepted Letter of Assurance.

Affiliates

31. Who is an Affiliate?

An <u>Affiliate</u> is an entity that directly or indirectly, through one or more intermediaries, controls the <u>Submitter</u>, is controlled by the Submitter, or is under common control with the Submitter. For the purposes of this definition, the term "control" and its derivatives, with respect to for-profit entities, means the legal, beneficial, or equitable ownership, directly or indirectly, or more than fifty percent (50%) of the capital stock (or other ownership interest, if not a corporation) of an entity ordinarily having voting rights. "Control" and its derivatives, with respect to nonprofit entities, means the power to elect or appoint more than fifty percent (50%) of the Board of Directors of an entity. See <u>clause 6.1</u> of the *IEEE-SA Standards Board Bylaws* available at http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6.1. For example, the parent corporation of a Submitter, any brother or sister corporation of the Submitter, and any Submitter subsidiary in which the Submitter owns more than 50% are considered Affiliates.

32. Does the Letter of Assurance bind Affiliates?

Yes, other than those Affiliates explicitly excluded in a Letter of Assurance.

Application of LOA to Successors of Essential Patent Claims Covered by LOA

33. What does the Submitter of a Letter of Assurance have to do if the Submitter transfers one or more Essential Patent Claims covered by the Letter of Assurance to a third party?

The <u>Submitter</u> of a <u>Letter of Assurance</u> is required to provide notice of the Letter of Assurance to any assignee or transferee of any <u>Essential Patent Claims</u> covered by the Letter of Assurance. That notice can be provided by notifying the assignee or transferee that the Essential Patent Claims are subject to an <u>Accepted Letter of Assurance</u> or by a general statement in the transfer or assignment agreement that the Essential Patent Claims being transferred or assigned are subject to any encumbrances that may exist as of the effective date or such agreement. For example, a Submitter could include a provision like the following in its purchase agreement:

"One or more of the assets being transferred are subject to encumbrances that may exist as of the Effective Date of the Purchase Agreement."

In addition, the Submitter shall require that the assignee or transferee agree to provide the same notice to any subsequent assignees or transferees and require its subsequent assignees or transferees to do the same.

Hypothetical. Company A submits a Letter of Assurance for an Essential Patent Claim for IEEE Standard X which is accepted by the IEEE-SA. Two years after submitting the Letter of Assurance, Company A sells all of its assets to Company B, including the Essential Patent Claim. Three years later, Company B sells the Essential Patent Claim to Company C. Subsequently, Company C sells the Essential Patent Claim to Company D but does not provide the required notice to Company D.

(a) Company A's Obligations

Company A can fulfill its obligations to the IEEE-SA in one of two ways:

- ✓ Company A can notify Company 8 that the Essential Patent Claim is subject to an Accepted Letter of Assurance; or
- Company A can provide a statement in its purchase agreement with Company B that one or more of the assets being transferred may be subject to any encumbrances that may exist as of the effective date of such agreement.

Regardless of which path it takes, Company A also must require that Company B agree to provide the same notice to its assignees or transferees and to bind those assignees or transferees to provide the same notice.

(b) Company B's Obligations

Company B can fulfill its obligations to the IEEE-SA one of two ways:

- ✓ Company B can notify Company C that the Essential Patent Claim is subject to an Accepted Letter of Assurance; or
- Company B can provide a statement in its purchase agreement with Company C that one or more of the assets being transferred may be subject to any encumbrances that may exist as of the effective date of such agreement.

Regardless of which path it takes, Company B also must require that Company C agree to provide the same notice to its assignees or transferees and to bind those assignees or transferees to provide the same notice.

(c) Company C's Obligations

Company C must agree to provide the same notice to its assignees or transferees and to bind those assignees or transferees to provide the same notice as described in (a) and (b) above. In this case, Company C did not provide the required notice to Company D in breach of its agreement with Company B. However, as long as Company B required that Company C provide the required notice to Company D, Company B has fulfilled its commitment under the Letter of Assurance. Although Company B may decide not seek to enforce its agreement with Company C, users and implementers could themselves seek to enforce Company C's agreement to provide required notice to Company D.

34. If a Submitter transfers one or more Essential Patent Claims that may be covered by a Letter of Assurance, what commitment does it need to get from the transferee regarding the Letter of Assurance?

See answer to question 33.

35. Does the Submitter have any responsibility to ensure that its assignees and transferees provide notice of the Letter of Assurance to subsequent transferees?

No. As long as the <u>Submitter</u> provides the required notice to its assignees and transferees and requires that its assignees and transferees agree to provide the required notice and bind its assignees and transferees to the same, the Submitter is not responsible for the actions of any downstream assignees and transferees.

Licensing Terms Provided with Letters of Assurance

36. A Submitter of a Letter of Assurance is permitted to provide a not-to-exceed license fee or rate commitment. What is the purpose of permitting a Submitter to provide a not-to-exceed license fee or rate commitment?

The purpose of the policy is to facilitate the development of standards that will serve the interests of industry, government, and the public. Relative costs of implementation for different proposed technical approaches in comparison with the relative technical performance increases or decreases of those proposals is a legitimate topic for discussion and a legitimate basis for decision-making in the standards development process. The new policy attempts to provide participants with greater certainty and precision in their understanding of relative costs.

37. Is a Submitter of a Letter of Assurance **required** to provide a not-to-exceed license fee or rate commitment?

No. The IEEE-SA permits, but does not require, the <u>Submitter</u> to provide not-to-exceed royalty rates or other terms.

38. Does the IEEE make a judgment about whether any terms provided with the Letter of Assurance are reasonable or non-discriminatory?

No. The IEEE is not responsible for identifying <u>Essential Patent Claims</u> for which a license may be required, for conducting inquiries into the legal validity or scope of those Essential Patent Claims, or for determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance, if any, or in any licensing agreements are reasonable or non-discriminatory. Acceptance of a <u>Letter of Assurance</u> does not imply that the IEEE has made any determination of the reasonableness of the foregoing.

39. What is the meaning of "reasonable rates" and "reasonable terms and conditions"?

As noted in the answer to question 38, the IEEE-SA takes no position on, and has no responsibility for determining, the reasonableness of disclosed royalty rates or other licensing terms and conditions. The IEEE-SA's acceptance of a Letter of Assurance does not imply any finding that the disclosed not-to-exceed terms are or are not reasonable. The IEEE-SA's approval of a standard does not imply any finding (in the case of a standard for which not-to-exceed terms have been disclosed) that such terms are or are not reasonable or any finding (in the case of a standard for which not-to-exceed terms were not disclosed) that reasonable terms would be greater or less than the disclosed maximum terms (if any) for any other technology.

40. The policy says that "copies of an Accepted Letter of Assurance may be provided to the Working Group, but shall not be discussed, at any standards Working Group meeting."

a) Can copies of Accepted Letters of Assurance be handed out at a standards development meeting?

Yes. A participant may provide an <u>Accepted Letter of Assurance</u> to other participants by handing out paper copies of an Accepted Letter of Assurance (including a copy of the accepted license or material licensing terms, if provided as part of the Letter of Assurance) or a data file with an image of the Accepted Letter of Assurance as it resides on the <u>IEEE website</u>.

b) Can the link to the IEEE website for an accepted Letter of Assurance be provided?

Providing or displaying the IEEE URL for an <u>Accepted Letter of Assurance</u> is also acceptable.

c) Can the actual Accepted Letter of Assurance be displayed on a screen?

Yes, but it is not recommended. The <u>Letter of Assurance</u> consists of three pages of often very small type. Therefore, the display is not going to be legible except in the smallest of rooms. The lack of legibility may lead to impermissible questions or discussion. Nevertheless, displaying the <u>Accepted Letter of Assurance</u> as it resides on the <u>IEEE website</u> is not a violation of the patent policy provided a participant does not read aloud, present, or answer questions about the displayed Letter of Assurance.

d) Can a participant make a presentation or answer questions about the not-to-exceed license fee or rate, material licensing terms, sample license agreement?

No, except that using one or more not-to-exceed rates as components in a presentation comparing relative costs is acceptable. Further information can be found in "What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy."

e) What can standards development groups discuss about Letters of Assurance or submitted license terms?

Nothing, other than distribution of the Letter of Assurance as described in FAQ 40(a) above. In addition, using one or more not-to-exceed rates as components in a presentation comparing <u>relative costs</u> is acceptable. Further information can be found in "<u>Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy</u>".

f) Doesn't it make sense to discuss license terms as part of an overall evaluation of a proposed technology?

IEEE-SA standards development meetings consist primarily of engineers who are there primarily to discuss the technical merits of competing solutions. Some knowledge of <u>relative cost</u> is entirely appropriate, and the policy provides for exactly that. But licensing issues can be complex and involve not just technical issues but legal and business issues as well, and those discussions can require a different set of people than are present for the technical meetings.

g) What do I do if the standards development group launches into a discussion of patent licensing terms?

A participant should object to, and a Working Group Chair shall close down, any discussion that is not permitted under IEEE-SA policies.

h) What should the chair do if a participant wants to modify the terms of an Accepted Letter of Assurance during the meeting?

An <u>Accepted Letter of Assurance</u> cannot be modified, either in the meeting or elsewhere. Anyone who wishes to submit an additional <u>Letter of Assurance</u> may do so (although any previous Accepted Letters of Assurance will continue to be available). The chair should instruct the individual to submit a new Letter of Assurance as provided in the <u>IEEE-SA Standards Board Operations Manual</u>. See also response to question 43.

i) What about conversations in the hallway? Can participants discuss the particulars of license terms there?

The IEEE-SA regulates what goes on in forums that the IEEE-SA provides, such as meeting rooms and email reflectors. The IEEE-SA has no ability to regulate purely private conduct of its participants. There are some topics that participants should not discuss regardless of where they are (such as prices that each of them as competitors will charge for compliant products). There are other topics that participants shall not discuss in IEEE-SA forums and shall not discuss in immediately adjacent spaces that might reasonably lead outside observers to believe it is just a continuation of the formal meeting. Further information can be found in "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy".

j) If a Letter of Assurance is submitted without the Submitter's having exercised the option of providing a not-to-exceed license fee or rate commitment or other

license terms, is it okay for a Working Group participant to request or encourage the Submitter to file an additional Letter of Assurance to provide that information?

No. Although <u>relative cost comparisons</u> can certainly note the absence of cost information, participants shall not request license fees, terms, or conditions during technical standards-development meetings or in other IEEE-SA forums for technical discussions (such as email reflectors).

k) What can be discussed about patents in a standards development group meeting or in an IEEE-SA email reflector?

You can discuss the technical merits of using the technology included even if it is included within a potential <u>Essential Patent Claim</u>. You can discuss and compare the <u>relative costs</u> of technology claimed in potential Essential Patent Claims. You must not discuss subjects such as how a patent should be licensed, or essentiality, validity, or interpretation of a patent claim. These are not appropriate topics for discussion in a standards developing committee. Further information can be found in "<u>What You Need to Know About IEEE Standards and the Law"</u>.

41. Can someone submit a different Letter of Assurance for different Essential Patent Claims within the same standard?

Yes. A <u>Submitter</u> may submit separate <u>Letters of Assurance</u> providing different licensing positions for different potential <u>Essential Patent Claims</u>.

42. If a person submits a Letter of Assurance but doesn't identify a specific Essential Patent Claim covered by the Letter of Assurance, are the assurances binding on all of the Essential Patent Claims owned by the Submitter's company?

Yes.

43. Can a Submitter change the terms of the assurance it has given after it has been accepted by the IEEE? For example, what if the Submitter decided to lower the not-to-exceed price it would offer to license for an Essential Patent Claim?

A <u>Letter of Assurance</u> is irrevocable once submitted and accepted and shall apply, at a minimum, from the date of the standard's approval to the date of the standard's transfer to inactive status. Thus, a <u>Submitter</u> cannot change the terms of the Letter of Assurance for a particular <u>Essential Patent Claim</u> once it is accepted. However, over time, a Submitter may provide multiple assurances for a given Essential Patent Claim by submitting multiple Letters of Assurance for

such claim, each of which shall be binding on the Submitter. Each potential licensee may choose to invoke the terms of any applicable Letter of Assurance accepted by the IEEE. Thus, the Submitter desiring to lower the not-to-exceed price the Submitter would offer to license for an Essential Patent Claim can submit an additional Letter of Assurance with the revised not-to-exceed price and each potential licensee may choose to invoke the terms of either Letter of Assurance.

Blanket Letter of Assurance

44. What is a "Blanket Letter of Assurance"?

A <u>Blanket Letter of Assurance</u> is a <u>Letter of Assurance</u> referencing a standard or project that applies to all <u>Essential Patent Claims</u> for which a <u>Submitter</u> may currently or in the future (except as otherwise provided for in the <u>IEEE-SA Standards Board Bylaws</u> and in the <u>IEEE-SA Standards Board Operations</u>

<u>Manual</u>) have the ability to license. This is defined in <u>clause 6.1</u> of the IEEE-SA Standards Board Bylaws available at http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6.1.

45. What happens if the Submitter submits a Blanket Letter of Assurance after previously offering a specific Letter of Assurance?

If a <u>Submitter</u> has signed and submitted a <u>Letter of Assurance</u> specifically identifying an <u>Essential Patent Claim</u> before or concurrently with signing and submitting a <u>Blanket Letter of Assurance</u>, the Blanket Letter of Assurance cannot be invoked as to the specified Patent Claim.

46. Does a Blanket Letter of Assurance apply to Essential Patent Claims that my company acquires after submitting the Letter of Assurance?

Yes, unless the acquired entity or the prior holder of the acquired <u>Essential Patent Claim</u> has submitted a <u>Letter of Assurance</u> before the acquisition. Any <u>Blanket Letter of Assurance</u> submitted by the acquired entity or the prior holder of the acquired Essential Patent Claim before the acquisition shall continue to apply to acquired Essential Patent Claims covered by such assurance (but not to the acquirer's Essential Patent Claims). An acquiring party can ask a seller of an acquired Essential Patent Claim or an acquired entity to submit additional Letters of Assurance before closing of the acquisition.

Implementation of new policy

47. What is the effective date of the new patent policy?

The effective date of the new patent policy set forth in the <u>IEEE-SA Standards</u> <u>Board Bylaws</u> and <u>IEEE-SA Standards Board Operations Manual</u> is 1 May 2007.

48. Will the new policy apply to existing standards development projects currently underway as well as new standards development projects?

As has long been the practice for all *IEEE-SA Standards Board Bylaws* and *IEEE-SA Standards Board Operations Manual* changes, changes to policy will go into effect for all Working Groups at the same time. This is usually 1 January of each year, but the IEEE-SA Board of Governors set the effective date of these changes to be 1 May 2007. Of course, any <u>Letters of Assurance</u> for a Standard/Project received before 1 May 2007 will be honored (i.e., there is no need for a Working Group Chair to request a Letter of Assurance on the new form from a holder of a potential <u>Essential Patent Claim</u> if the holder has already submitted an Accepted Letter of Assurance).

49. Can a participant provide a not-to-exceed license fee or rate commitment after 1 May 2007 for a Letter of Assurance that was submitted to the IEEE-SA prior to 1 May 2007?

<u>Letters of Assurance</u> are irrevocable once submitted and accepted. However, after 1 May 2007, a holder that has already submitted an <u>Accepted Letter of Assurance</u> may submit a subsequent letter on the new Letter of Assurance <u>form</u> if it wants to update the information on the previously submitted Letter of Assurance. In such a case, a potential licensee would have the right to invoke the terms of either Letter of Assurance. See also answer to question 43.

Ballot resolution regarding Essential Patent Claims

50. During ballot resolution, what should be the response to a comment regarding the lack of an LOA?

If an <u>LOA</u> has not been requested from the indicated holder of a potential <u>Essential Patent Claim</u>, the process for requesting an LOA should be followed (See <u>6.3.2</u> 'Call for patents' in the <u>IEEE-SA Standards Board Operations Manual</u>).

Further, the comment response should state that the IEEE is not responsible:

- For identifying Essential Patent Claims for which a license may be required
- For conducting inquiries into the legal validity or scope of <u>Patent Claims</u>

(Taken from the subclause <u>6.3.1</u> 'Public notice' of the IEEE-SA Standards Board Operations Manual)

and that no discussions or other communications regarding the

- Essentiality of patent claims
- Interpretation of patent claims
- Validity of patent claims

shall occur during IEEE-SA working group standards-development meetings or other duly authorized IEEE-SA standards-development technical activities.

(Note: This is not a complete list of the items for non-discussion. Adapted from $\underline{5.3.10.2}$ 'Discussion of litigation, patents, and licensing' of the IEEE-SA Standards Board Operations Manual).

EXHIBIT 15

Patent Statement and Licensing Declaration Form for ITU-T/ITU-R Recommendation | ISO/IEC Deliverable







Patent Statement and Licensing Declaration for ITU-T/ITU-R Recommendation | ISO/IEC Deliverable

This declaration does not represent on actual grant of a license

Director	Director	Secretary-General	General Secretary
Telecommunication Standardization Bureau International Telecommunication Union Place des Nations CH-1211 Geneva 20, Switzerland Fax: +41 22 730 5853 Email: statu@ite.int	Radiocommunication Bureau International Telecommunication Union Place des Nations CH-1211 Geneva 20, Switzerland Fax: +41 22 730 5785 Email: bemail@itu.int	International Organization for Standardization 1 Chemin de la Voie-Creuse CH-1211 Geneva 20 Switzerland Fax: +41 22 733 3430 Email: patent statements@iso.org	International Electrotechnical Commission 3 rue de Varembé CH-1211 Geneva 20 Switzerland Fax: +41 22 919 0300 Email. inmail@ice.ch

Patent Holder:	
Legal Name	Motorola Mobility, Inc
Contact for license a	application:
Name & Department	Ray Warren, Law Department
Address	600 N. US Highway 45
	Libertyville, Illinois, U.S.A.
Tel.	+1-847-523-0668
Fax	+1-847-761-4731
E-mail	Ray.Warren@motorola.com
URL (optional)	
Document type:	
ITU-T Rec. (*)	TTU-R Rec. (*) ISO Deliverable (*) IEC Deliverable (*)
(please return the form	n to the relevant Organization)
	or twin text (ITU-T Rec. ISO/IEC Deliverable (*)) (for common text or twin text, please h of the three Organizations: ITU-T, ISO, IEC)
ISO/IEC Delive	erable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC)
(*)Number	ITU-T H.264(03/2010)
(*)Title	Advanced video coding for generic audiovisual services

Licensing	declaration:					
required to	o implement the abo	at it holds granted and/or pending applications for patents, the use of which would be over document and hereby declares, in accordance with the Common Patent Policy for check one box only):				
	1. The Patent Holder is prepared to grant a free of charge license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and under other reasonable terms and conditions to make, use, and sell implementations of the above document.					
	Negotiations are le	fi to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC.				
	Also mark here document.	if the Patent Holder's willingness to liceuse is conditioned on <u>reciprocity</u> for the above				
	conditions (l whose use w	ereif the Patent Holder reserves the right to license on reasonable terms and out not free of charse) to applicants who are only willing to license their patent claims, ould be required to implement the above document, on reasonable terms and out not free of charse).				
\boxtimes	worldwide, non-dis	of Holder is prepared to grant a license to an unrestricted number of applicants on a scriminatory basis and on reasonable terms and conditions to make, use and self the above document.				
	Negotiations are le	fi to the parties concerned and are performed outside the ITU-T, ITU-R, ISO, or IEC.				
	Also mark here 🛭 ubove document.	if the Patent Holder's willingness to license is conditioned on reciprocity for the				
	3. The Pater above.	at Holder is unwilling to grant licenses in accordance with provisions of either 1 or 2				
	In this case, the following information must be provided to ITU, and is strongly desired by ISO and IEC, as part of this declaration:					
	 granted patent number or patent application number (if pending); 					
	- an indication of which portions of the above document are affected;					
	- a description of	the patent claims covering the above document.				
respect to Patent Hol compensate committing of the above	the essential patent, der will not seek an ion is called a royal g to not charging an we document sign a	ree of charge" do not mean that the Patent Holder is waiving all of its rights with Rather, "free of charge" refers to the issue of monetary compensation; i.e., that the y monetary compensation as part of the licensing arrangement (whether such ty, a one-time licensing fee, etc.). However, while the Patent Holder in this situation is y monetary amount, the Patent Holder is still entitled to require that the implementer license agreement that contains other reasonable terms and conditions such as those d of use, reciprocity, warranties, etc.				
Reciprocity: As used herein, the word "reciprocity" means that the Patent Holder shall only be required to licer any prospective licensee if such prospective licensee will commit to license its essential patent(s) or essential patent(s) for implementation of the same above document free of charge or under reasonable terms and condition						
Signature	:					
Patent Holder		Motorola Mobility, Inc.				
Name of a	uthorized person	Kirk W. Dailey				
Title of au	thorized person	Corporate Vice President				
Signature		and the state of				
Place, Date		Libertyville, Illinois, U.S.A., December 8, 2010				

FORM: 1 March 2007

No. }	Status (granted/ pending)	Country	Granted Patent Number or Application Number (if pending)	Title
I				FREQUENCY COEFFICIENT SCANNING PATHS FOR CODING DIGITAL VIDEO
2	Granted Granted	United States United States (Japan European Patent Convention)	6987888 7421025	MACROBLOCK LEVEL ADAPTIVE FRAME/FIELD CODING FOR DIGITAL VIDEO CONTENT
3	Granted	United States (Japan European Patent Convention)	7310375	MACROBLOCK LEVEL ADAPTIVE FRAME/FIELD CODING FOR DIGITAL VIDEO CONTENY
4	Granted	United States (European Patent Convention)	7310374	MACROBLOCK LEVEL ADAPTIVE FRAME/FIELD CODING FOR DIGITAL VIDEO CONTENT
5	Granted	United States	7310376	MACROBLOCK LEVEL ADAPTIVE FRAME/FIELD CODING FOR DIGITAL VIDEO CONTENT
6	Granted	United States	7310377	MACROBLOCK LEVEL ADAPTIVE FRAME/FIELD CODING FOR DIGITAL VIDEO CONTENT
7	Granted	United States (European Patent Convention)	7477690	MACROBLOCK LEVEL ADAPTIVE FRAME/FIELD CODING FOR DIGITAL VIDEO CONTENT
8	Granled	United States (European Patent Convention)	7817718	MACROBLOCK LEVEL ADAPTIVE FRAME/FIELD CODING FOR DIGITAL VIDEO CONTENT
9	Granted	United States (China P.R. European Patent Convention Republic of Korea Mexico)	7769087	PICTURE LEVEL ADAPTIVE FRAME/FIELI CODING FOR DIGITAL VIDEO CONTENT
10	Granted	United States (China P.R. European Patent Convention Mexico)	7660953	PICTURE LEVEL ADAPTIVE FRAME/FIELI CODING FOR DIGITAL VIDEO CONTENT
11	Granted	United States	7162094	FREQUENCY COEFFICIENT SCANNING PATHS FOR DIGITAL VIDEO CONTENT

NOTE: For option 3, the additional minimum information that shall also be provided is listed in the option 3 box above.

637

DISCLAIMER: This database is not certified to be either accurate or complete, but only reflects the information that has been communicated to ITU-T secretariat. The references to patents or patent applications have been included as notified to ITU-T secretariat. ITU-T secretariat has not verified the veracity or accuracy of such statements, nor the relevance of the identified patents or patent applications to ITU-T Recommendations.

Recommendation

number:

T-REC-H.264

Statement Id:

H264-30

Patent

holder/Organization:

General Instrument Corp

Main contact:

Mr. Paul Bawel, Director, Law department

101 Tournament Drive

Address:

Horsham, PA 19044

United States

Tel. No.: Fax. No.: +1 215 323 1907 +1 215 323 1300

Declaration form

version:

15 June 2002 (Common Text)

Option 2_ The Patent Holder will grant a license to an unrestricted number of applicants on a worldwide, nondiscriminatory basis and on reasonable terms and conditions to use the patented material necessary in order to manufacture, use, and/or sell implementations

Licensing declaration:

of the above ITU-T Recommendation | ISO/IEC International Standard. The patent Holder's willingness to license is conditioned on reciprocity for the above ITU-T Recommendation | ISO/IEC

International Standard. Negotiations of licenses are left to the parties

concerned and are performed out side the ITU-T | ISO/IEC.

Patent info:

None

ITU-T registration

2003-12-19

date:

Statement

2003-12-02

declaration date:

(Note by TSB): General instrument corporation is a wholly owned subsidiary of Motorola. Motorola submitted the statement H264-91

Statement remarks:

on 2008-11-03 to provide updated information relative to this

statement (see H264-91).

ITU

International Telecommunication Union Talecommunication Standardization Sector ISO
...tismalicial Organization for Standardization

en in

IEC
international Electrometerical Commission







19 der 2003 H264-30

Patent Statement and Licensing Declaration

for a common text or twin text ITU-T Recommendation | ISO/IEC International Standard

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Please return to both organizations:

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Telecommunication Standardization Bureau
International Telecommunication Union

Place der Nutions CH-1211 Geneva 20, Swit errland Secretary General International Organization for Standardization

I rue de Varronbo CH-121 | Genova 20 Refizerland

Switzerland Sax: +41 22 734 5079

	J*8x: +4 22 /4U 383	CBX: 741 22 134 1079
Patent I Legal N	Holder/Organization: amc General Instrument Corporation	
Contact Name & Departm Address		8202
Tel. Fax E-mail	215.323.J907 / · 215.523.L300	
TU-T F Number Title	Recommendation ISO/IEC International Standard: +1264-30	·
The Pate required declares,	ent Holder believes that it holds granted patents and/or pending applications, the stomplement the above ITU-T F.ecommendation ISO/IEC International Standa, in accordance with the Statengart on ITU-T Patent Policy (see ITU-T web site) solicy (ITC 1 Directives), that (check one box only).	rd and hereby
	1. The Patent Holder will grant a royalty-free license to an unrestricted not a worldwide, non-discriminatory basis to use the patented material necessary in use, and/or sell implementations of the above ITU-T Recommendation ISO/IE Standard. Mark here if the Patent Holder's willingness to license is condition the above ITU-T Recommendation ISO/IEC International Standard.*	n order to manufactur C International
	2. The Patent Holder will grant a license to an unrestricted number of app worldwide, non-discriminatory basis and on reasonable terms and conditions to material necessary in order to administrate, use, and/or sell implementations of Recommendation ISO/IEC International Standard. Mark here X if the Patent to license is conditioned on remprocity for the above ITU-T Recommendation International Standard.* Negotiations of licenses are 1.6 to the parties concerned and are performed out ISO/IEC.	nuse the patented the above ITU-T Holder's willingness ISO/IEC
	3. The Patent Holder is unwilling to grant liceuses in accordance with pro 2 above. In this case, the following information must be provided as part of this patent registration/application number;	

an indication of which portions of the 1TU-T Recommendation [1SO/IEC International Standard

a description of the patent claims covering the ITU-T Recommendation | ISO/IBC International

IPR/Common text parent 15 June 02

are affected.

Standard;

"Reciprocity" means with respect to other parties that have a patent or patent claim required in the use or implementation of the relevant ITU-T Recommendation(s) | ISO/IEC International Standard(s), the Patent Holder shall only be required to license to such parties if they are willing to license their patents or patent claims under options 1 or 2 of the Patent Statement and Licensing Declaration.

Signature

Organization
Name of authorized

General Instrument Corporation

person

Paul Bawel

Title of authorized

Sector IP Law Director

person Signature

Place, Date Horn

IPR/Common text putent 15 June 02

TOTAL P.03

}

DISCLAIMER: This database is not certified to be either accurate or complete, but only reflects the information that has been communicated to ITU-T secretariat. The references to patents or patent applications have been included as notified to ITU-T secretariat. ITU-T secretariat has not verified the veracity or accuracy of such statements, nor the relevance of the identified patents or patent applications to ITU-T Recommendations.

Recommendation

number: T-REC-H.264

Statement Id: H264-81

Patent

Motorola Inc.

holder/Organization:

Main contact: Ms. Latonia Gordon, Intellectual Property and Licensing Dept.

1303 E. Algonquin Road

Address: Schaumburg, IL 60196

United States

Tel. No.: +1 847 576 3055 **Fax. No.:** +1 847 538 3666

Declaration form

version:

Licensing

declaration:

1 March 2007 (Individual, Common Text, General)

Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or

IEC. The Patent Holder's willingness to license is conditioned on

reciprocity for the above document.

Patent info:

Patent Number	Application Number	Country	Foreign Counterparts	Title	Status	TSB Remark	TSB Patent Id	TSB Old Patent Id
6005 980		US		Motion estimation and compensation of video object planes for interlaced digital video	Granted		H264- 81-01	
6 980 596		US		Macroblock level adaptive frame/field coding for digital video content	Granted		H264- 81-02	

ITU-T registration

date:

2007-08-20

Statement

2007-08-10

declaration date:

The statement provides the complementary information to the statment **Statement remarks:** H264-30 submitted on 19 December 2003.

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Recommendation

T-REC-H.264

Statement Id:

H264-91

Patent

number:

Motorola Inc.

holder/Organization:

Main contact: Ms. Latonia Gordon, Intellectual Property and Licensing Dept.

1303 E. Algonquin Road

Address: Schaumburg, IL 60196

United States

Tel. No.: +1 847 576 3055 **Fax. No.:** +1 847 538 3666

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declaration:

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Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or

IEC. The Patent Holder's willingness to license is conditioned on

reciprocity for the above document.

Patent info:

Patent Number	Application Number	Country	Foreign Counterparts	Title	Status	TSB Remark	TSB Patent Id	TSB Old Patent Id
7620094		US		Frequency coefficient scanning paths for digital video content	Granted		H264- 91-01	
RE 38564		US		Motion estimation and compensation of video object planes for interlaced digital video	Granted		H264- 91-02	
5 3 7 6		US			Granted		H264-	

968		compression of digital video data	91-03
6 807 317	US	Method and decoder system for reducing quantization effects of a decoded image	H264- 91-04
6 836 514	US	Method for the detection and recovery of errors in the frame Granted overhead of digital video decoding systems	H264- 91-05

ITU-T registration

date:

2008-11-03

Statement

declaration date:

2008-10-29

Motorola submitted this statement to provide updated information relative to their earlier statement in H.264-30 (submitted 2003-12-19).

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Patent Statement and Licensing Declaration for ITU-T/ITU-R Recommendation | ISO/IEC Deliverable

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Email: patent_statements@iso.org General Secretary
International Electrotechnical
Commission
3 rue de Varembé
CH-1211 Geneva 20
Switzerland
Fax: +41 22 919 0300
Email:

inmail@icc.ch

Patent Holder: Legal Name Motorola, Inc Contact for license application: Name & Latonia Gordon, Intellectual Property and Licensing Dept. Department 1303 E. Algonquín Road, Schaumburg, IL 60196 Address Tel. +1 847-576-3055 Fax +1 847-538-3666 E-mail Latonia.Gordon@Motorola.com URL (optional) Document type: X ITU-T Rec. (*) ITU-R Rec. (*) ISO Deliverable (*) IEC Deliverable (*) (please return the form to the relevant Organization) Common text or twin text (ITU-T Rec. | ISO/IEC Deliverable (*)) (for common text or twin text, please return the form to each of the three Organizations: ITU-T, ISO, IEC) ISO/IEC Deliverable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC) (*)Number H.264(2005)-update I.D Number:H.264-30 submitted December 19,2003 (*)Title Advanced Video Coding for Generic Audiovisual Services,

Licensing	g declaration:			
required t		It it holds granted and/or pending applications for patents, the use of which would be we document and hereby declares, in accordance with the Common Patent Policy for check one box only):		
	applicants on a wor	Holder is prepared to grant a <u>free of charge</u> license to an unrestricted number of dwide, non-discriminatory basis and under other reasonable terms and conditions to implementations of the above document.		
		to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. If the Patent Holder's willingness to license is conditioned on reciprocity for the above		
	conditions (b) whose use wo	re if the Patent Holder reserves the right to license on reasonable terms and ut not free of charge) to applicants who are only willing to license their patent claims, while the condition of the condition is and the condition of the condition o		
\boxtimes	worldwide, non-disc	Holder is prepared to grant a license to an unrestricted number of applicants on a criminatory basis and on reasonable terms and conditions to make, use and sell the above document.		
	Negotiations are lef	to the parties concerned and are performed outside the ITU-T, ITU-R, ISO, or IEC.		
	Also mark here 🔯 i document.	f the Patent Holder's willingness to license is conditioned on reciprocity for the above		
	3. The Patent above.	Holder is unwilling to grant licenses in accordance with provisions of either 1 or 2		
	In this case, the follows part of this declar	owing information must be provided to ITU, and is strongly desired by ISO and IEC, ation:		
	- granted patent n	umber or patent application number (if pending);		
	- an indication of	which portions of the above document are affected;		
	- a description of the patent claims covering the above document.			
respect to Patent Hol compensate committing of the above	the essential patent. Ider will not seek any tion is called a royalt g to not charging any we document sign a li	the of charge" do not mean that the Patent Holder is waiving all of its rights with Rather, "free of charge" refers to the issue of monetary compensation; i.e., that the monetary compensation as part of the licensing arrangement (whether such y, a one-time licensing fee, etc.). However, while the Patent Holder in this situation is monetary amount, the Patent Holder is still entitled to require that the implementer cense agreement that contains other reasonable terms and conditions such as those of use, reciprocity, warranties, etc.		
any prospo	ective licensee if such	ne word "reciprocity" means that the Patent Holder shall only be required to license of prospective licensee will commit to license its essential patent(s) or essential patent the same above document free of charge or under reasonable terms and conditions.		
Signature	:			
Patent Hol	der	Motorola, Inc.		
Name of authorized person		Jonathan Meyer		
Title of au	thorized person	Sepior Vice-President, Intellectual Property Licensing		
Signature	-	I mus		
Place, Date		Schaumburg, IL, October 29, 2008		

FORM: 1 March 2007

No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
1	Granted	US	7,162,094	Frequency Coefficient Scanning Paths For Digital Video Content
2	Granted	US	RE38564	Motion Estimation And Compensation Of Video Object Planes For Interlaced Digital Video
3	Granted	US	5,376,968	Adaptive Compression Of Digital Video Data

NOTE: For option 3, the additional minimum information that shall also be provided is listed in the option 3 box above.

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Recommendation

T-REC-H.264

Statement Id: H264-101

Patent

number:

holder/Organizati Motorola Mobility, Inc

on:

Main contact: Ray Warren, Law Department

600 N. US Highway 45

Address: Libertyville, IL

United States

Tel. No.: +1-847-523-0668 **Fax. No.:** +1-847-761-4731

Declaration form

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Patent info:

Patent Numbe r	annicatio	Countr y	Foreign Counterpar ts	Title	Status	TSB Remark	TSB Paten t Id	TSB Old Paten t Id
698788 8		US		FREQUENCY COEFFICIEN T SCANNING PATHS FOR CODING DIGITAL VIDEO CONTENT	Grante d		H264 -101- 01	
742102 5		US			Grante d	(Japan European Patent Convention)	H264 -101- 02	

		VIDEO CONTENT	
73 1037 5	US	MACROBLOC K LEVEL ADAPTIVE FRAME/FIEL D CODING FOR DIGITAL VIDEO CONTENT MACROBLOC (Japan European Patent Convention)	H264 -101- 03
731037 4	US	MACROBLOC K LEVEL ADAPTIVE FRAME/FIEL Grante (European Patent D CODING d Convention) FOR DIGITAL VIDEO CONTENT	H264 -101- 04
731037 6	US	MACROBLOC K LEVEL ADAPTIVE FRAME/FIEL Grante D CODING d FOR DIGITAL VIDEO CONTENT	H264 -101- 05
731037 7	US	MACROBLOC K LEVEL ADAPTIVE FRAME/FIEL Grante D CODING d FOR DIGITAL VIDEO CONTENT	H264 -101- 06
747769 0	US	MACROBLOC K LEVEL ADAPTIVE FRAME/FIEL Grante (European Patent D CODING d Convention) FOR DIGITAL VIDEO CONTENT	H264 -101- 07
781771 8	US	MACROBLOC K LEVEL ADAPTIVE Grante (European Patent Convention)	H264 -101 <i>-</i> 08

			FRAME/FIEL D CODING FOR DIGITAL VIDEO CONTENT				
776908 7	US	s		Grante d	(China P.R. European Patent Convention Repub lic of Korea Mexico)	H264 -101- 09	
766035 3	US	S		d	(China P.R. European Patent Convention Mexic o)	H264 -101- 10	
716209 4	US	s	FREQUENCY COEFFICIEN T SCANNING PATHS FOR DIGITAL VIDEO CONTENT	Grante d		H264 -101- 11	

ITU-T registration 2010-12-09

date:

Statement

declaration date:

2010-12-08

Motorola submitted this statement to provide updated information relative

Statement

to their earlier statement in H.264-30 (submitted 2003-12-19) and in in

H.264-91 (submitted 2008-11-3). remarks:

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Email: patent_statements@iso.org General Secretary
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Commission
3 rue de Varembé
CH-1211 Geneva 20
Switzerland
Fax: +41 22 919 0300
Email:
inmail@icc.ch

Patent Holder:							
Legal Name	Motorola, Inc						
Contact for license a	pplication:						
Name & Department	Latonia Gordon, Intellectual Property and Licensing Dept.						
Address	1303 E. Algonquín Road, Schaumburg, IL 60196						
Tel.	+1 847-576-3055						
Fax	+1 847-538-3666						
E-mail	Latonia.Gordon@Motorola.com						
URL (optional)							
Document type:							
ITU-T Rec. (*)	ITU-R Rec. (*) ISO Deliverable (*) IEC Deliverable	le (*)					
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ISO/IEC Deliverable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC)							
(*)Number	H.264(2005)-update I.D Number:H.264-30 submitted December 19,2003						
(*)Title	Advanced Video Coding for Generic Audiovisual Services,						

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Signature	:			
Patent Hol	lder	Motorola, Inc.		
Name of a	uthorized person	Jonathan Meyer		
Title of au	thorized person	Sepior Vice-President, Intellectual Property Licensing		
Signature	-	Ve Mus		
Place, Date	e <i>O</i> .	Schaumburg, IL, October 29, 2008		

FORM: 1 March 2007

No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
1	Granted	US	7,162,094	Frequency Coefficient Scanning Paths For Digital Video Content
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Switzerland Fax: +41 22 733 3430 Email:

patent, statements@iso.org

General Secretary International Electrotechnical Commission 3 ruc de Varembé CH-1211 Geneva 20 Switzerland Fax: +41 22 919 0300 Email: inmail@icc.ch

Patent Holder: Legal Name Motorola, Inc Contact for license application: Name & Latonia Gordon, Intellectual Property and Licensing Dept. Department Address 1303 E. Algonquin Road, Schaumburg, IL 60196 Tel. +1 847-576-3055 +1 847-538-3666 Fax E-mail Latonia.Gordon@Motorola.com URL (optional) Document type: | ITU-T Rec. (*) ITU-R Rec. (*) ISO Deliverable (*) IEC Deliverable (*) (please return the form to the relevant Organization) Common text or twin text (ITU-T Rec. | ISO/IEC Deliverable (*)) (for common text or twin text, please return the form to each of the three Organizations: ITU-T, ISO, IEC) ISO/TEC Deliverable (*) (for ISO/IEC Deliverables, please return the form to both ISO and IEC) H.264(2005)-update I.D Number:H.264-30 submitted December 19,2003 (*)Number (*)Title Advanced Video Coding for Generic Audiovisual Services,

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Patent Holder		Motorola, Inc.				
Name of authorized person		Jonathan Meyer				
Title of au	thorized person	Senion Vice-President, Intellectual Property Licensing				
Signature		Let Min				
Place, Dat	e Z	Schaumburg, IL, October 29, 2008				

FORM: 1 March 2007

No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
I	Granted	US	6,807,317	Method And Decoder System For Reducing Quantization Effects Of A Decoded Image
2	Granted	US	6,836,514	Method For The Detection And Recovery Of Errors In The Frame Overhead Of Digital Video Decoding Systems
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Address	1303 E. Algonquin Road, Schaumburg, IL 60196						
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(*)Number	H.264(2005)-update I.D Number:H.264-30 submitted December 19,2003						
(*)Title	Advanced Video Coding for Generic Audiovisual Services,						

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any prospe	ective licensee if suc	the word "reciprocity" means that the Patent Holder shall only be required to license in prospective licensee will commit to license its essential patent and conditions.				
Signature	:					
Patent Holder		Motorola, Inc.				
Name of authorized person		Jonathan Meyer				
Title of au	thorized person	Senion Vice-President, Intellectual Property Licensing				
Signature		Stro My				
Place, Dat	e <i>C</i>	Schaumburg, IL, October 29, 2008				

FORM: 1 March 2007

No.	Status [granted/ pending]	Country	Granted Patent Number or Application Number (if pending)	Title
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Recommendation

number:

T-REC-H.264

Statement Id:

H₂₆₄₋₃₀

Patent

holder/Organization:

General Instrument Corp

Main contact:

Mr. Paul Bawel, Director, Law department

101 Tournament Drive

Address:

Horsham, PA 19044

United States

Tel. No.: Fax. No.:

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Patent info:

None

ITU-T registration

2003-12-19

date:

Statement

2003-12-02

declaration date:

(Note by TSB): General instrument corporation is a wholly owned subsidiary of Motorola. Motorola submitted the statement H264-91 on 2008-11-03 and the statement H264-101 on 2010-12-09 to

Statement remarks:

provide updated information relative to this statement (see H264-91

and H262-101).

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1 1			t des		Maria III.		Cardidate C.M. Cita
None	H.264 (2005) Amd.3	Motorola Inc.		2007-08-10	28 June 2006 (Individual, Common Text, General)	Option 2_The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed ourside the ITU-T, ITU-R, ISO, or IEC The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ms. Latonia Gordon, Intellectual Property and Licensing Dept.
H264- 101-01	Н 264	Motorola Mobility, Inc	6987888	2010-12-09	1 March 2007 (Individual, Common Text, General)	Option 2 The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ray Warren, Law Department
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H264- 101-07	Н 264	Motorola Mobility, Inc	7477690	2010-12-09	I March 2007 (Individual, Common Text. General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ray Warren, Law Department
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H264- 101-11	H.264	Motorola Mobility, Inc	7162094	2010-12-09	1 March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and self implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ray Warren, Law Department
H264- 81-01	H.264	Motorola Inc.	6005 980	2007-08-20	I March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ms. Latonia Gordon, Intellectual Property and Licensing Dept.
H264- 81 <i>-</i> 02	Н 264	Motorola Inc.	6 980 596	2007-08-20	I March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed	Ms. Latonia Gordon, Intellectual Property and Licensing Dept.

						outside the ITU-T, ITU-R. ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	
H264- 81-03	H.264	Motorola Inc	5235419	2007-08-20	1 March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ms. Latema Gordon, Intellectual Property and Licensing Dept.
H264- 91-01	Н 264	Motorola Inc	7162094	2008-11-03	1 March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ms. Latonia Gordon, Intellectual Property and Lucensing Dept.
H264- 91-02	H.264	Motorola Inc.	RE 38564	2008-11-03	I March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ms. Laionia Gordon, Intellectual Property and Licensing Dept.
H264- 91-03	11 264	Motorola Inc	5 376 968	2008-11-03	1 March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ms. Latonia Gordon, Intellectual Property and Licensing Dept.
H264- 91-04	H.264	Motorola Inc.	6 807 317	2008-11-03	1 March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ms. Latonia Gordon, Intellectual Property and Licensing Dept.
H264- 91-05	Н 264	Motorola Inc.	6 836 514	2008-11-03	1 March 2007 (Individual, Common Text, General)	Option 2_ The Patent Holder is prepared to grant a license to an utrestricted number of applicants on a worldwide, non-discriminatory basis and on reasonable terms and conditions to make, use and sell implementations of the above document. Negotiations are left to the parties concerned and are performed outside the ITU-T, ITU-R, ISO or IEC. The Patent Holder's willingness to license is conditioned on reciprocity for the above document.	Ms. Latonia Gordon, Intellectual Property and Licensing Dept.

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Recommendation

number: T-REC-H.264

Statement Id: H264-91

Patent

Motorola Inc.

holder/Organization:

Main contact: Ms. Latonia Gordon, Intellectual Property and Licensing Dept.

1303 E. Algonquin Road

Address: Schaumburg, IL 60196

United States

Tel. No.: +1 847 576 3055 **Fax. No.:** +1 847 538 3666

Declaration form

version:

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IEC. The Patent Holder's willingness to license is conditioned on

reciprocity for the above document.

Patent info:

Patent Number	Application Number	Country	Foreign Counterparts	Title	Status	TSB Remark	TSB Patent Id	TSB Old Patent Id
7162094		US		Frequency coefficient scanning paths for digital video content	Granted		H264- 91-01	
RE 38564		US		Motion estimation and compensation of video object planes for interlaced digital video	Granted		H264- 91-02	
5 3 7 6		US		Adaptive	Granted		H264-	

968		compression of digital video data	91-03
6 807 317	US	Method and decoder system for reducing quantization effects of a decoded image	H264- 91-04
6 836 514	US	Method for the detection and recovery of errors in the frame Granted overhead of digital video decoding systems	H264- 91-05

ITU-T registration

date:

2008-11-03

Statement

declaration date:

2008-10-29

Motorola submitted this statement to provide updated information relative to their earlier statement in H.264-30 (submitted 2003-12-19).

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Recommendation

number: T-REC-H.264

Statement Id: H264-81

Patent

Motorola Inc.

holder/Organization:

Main contact: Ms. Latonia Gordon, Intellectual Property and Licensing Dept.

1303 E. Algonquin Road

Address: Schaumburg, IL 60196

United States

Tel. No.: +1 847 576 3055 **Fax. No.:** +1 847 538 3666

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IEC. The Patent Holder's willingness to license is conditioned on

reciprocity for the above document.

Patent info:

Patent Number	Application Number	Country	Foreign Counterparts	Title	Status	TSB Remark	TSB Patent Id	TSB Old Patent Id
6005 980		US		Motion estimation and compensation of video object planes for interlaced digital video	Granted		H264- 81-01	
6 980 596		US		Macroblock level adaptive frame/field coding for digital video content	Granted		H264- 81-02	

ITU-T registration

date:

2007-08-20

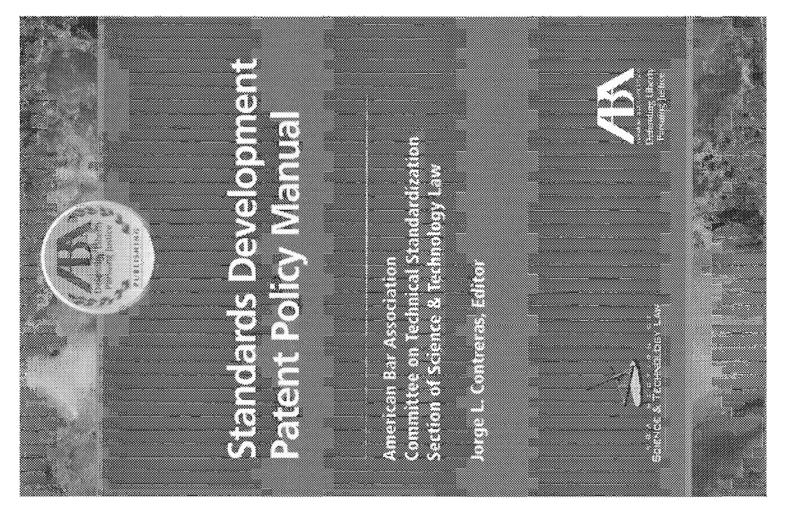
Statement

2007-08-10

declaration date:

The statement provides the complementary information to the statment **Statement remarks:** H264-30 submitted on 19 December 2003.

EXHIBIT 17





Standards Development Patent Policy Manual

American Bar Association Committee on Technical Standardization Section of Science & Technology Law

Jorge L. Contreras, Editor





not be construed to be the action of either the American Bar Association or the Section of Science and Technology Law unless adopted pursuant to the bylaws of the Association. Nothing readers are responsible for obtaining such advice from their own legal counsel. This book and The materials contained herein represent the opinions of the authors and editors and should contained in this book is to be considered as the rendering of legal advice for specific cases, and any forms and agreements herein are intended for educational and informational purposes only,

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FOREWORD

47 47 49 61 The Section of Science and Technology of the American Bar Association is pleased to present the Standards Development Patent Policy Manual. We are hopeful that this publication will serve as a valuable resource for technical standards organizations, standards developers, and lawyers with an interest in technical standards for many

This publication was prepared under the auspices of the Committee on Technical Standardization. Jorge L. Contreras, Chair, served as its primary editor, with substantial editorial and substantive assistance from Marc Sandy Block, Michele Herman, Susan Hoyler, and Amy Marasco. This publication also benefited from the regular input and advice of a dedicated subcommittee of experts from industry, academia, and private practice including Chuck Adarns, Kent Baker, Dan Bart, Larry Bassuk, Robert Bauer, Scott Bradner, Marc Braner, Pamela Deese, Ed Fiorito, Patricia Griffin, Hung Ling, Alan McGrath, Gil Ohana, Dorothy Raymond, Michelle Stamnes, Richard Taffet, George Willingmyre, and, of course, the founder of the Committee, Ollie Smoot. We are grateful to the Section of Antitrust Law and the Section of Intellectual

Property for their support in the preparation and discussion of this publication.

We would also like to thank Shawn Kaminski, Director of the Science and Technology Section, as well as the members of the Publications Committee who helped to make this project a reality.

William S. Coates

Chair, Section of Science and Technology Law American Bar Association

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E. DURATION OF PATENT DISCLOSURE OBLIGATION

SDO Participants may generally withdraw from the SDO and/or particular Working Groups at any turne. A Participant's disclosure obligation should continue during the entire period of its Participation in the SDO. The SDO may wish to address the possibility of a prospective Participant transferring Essential Claims in anticipation of joining the SDO (see Section III.A.1). While an SDO might be concerned about a Participant withdrawing and then filing patent applications to cover aspects of a Standard initiated during its period of Participation, imposing a duty to disclose after withdrawal from the SDO is generally viewed as unnecessarity burdensome on Patent Holders. This concern is often addressed in the Licensing Commitment (see Section IV.B.1.a), which may require a withdrawing Participant to continue to offer licenses with respect to Essential Claims covering Standards developed during its period of Participation in the SDO under certain prescribed circumstances.

A Participant's disclosure obligations under Section III.A shall terminate (upon its withdrawal from the SDO) [1]

and/or

[with respect to Bssential Claims relating to a particular Standard, upon its withdrawal from the relevant WGJ. [2]

[1] If the SDO wishes all of a Participant's disclosure obligations to terruinate upon its withdrawal from the SDO, then this clause may be used.

[2] In addition, if the SDO wishes to allow a Participant's disclosure obligations with respect to a particular Standard to terminate upon its withdrawal from the relevant WG, then this clause may be used in addition to the clause in II above.

IV. LICENSING COMMITMENTS AND LICENSING STATEMENTS

As defined in Section I, a Licensing Commitment is an obligation requiring a Participant to grant licenses under its Essential Claims. A Licensing Commitment is not itself a license grant. It is merely an obligation to grant a license on terms such as RAND or RANDz.

A Licensing Statement is a document containing an affirmative statement in which a Participant makes a Licensing Commitment or otherwise discloses the general nature of the terms on which it would be willing to grant licenses under its Essential Claims. However, some SDOs impose Licensing Commitments without requiring any particular Licensing Statement (for example, the Licensing Commitment may be embodied in the SDO's organizational documents, bylaws, Participation Agreement, or the like). Again, a Licensing Statement generally does not constitute the grant of a license, but generally states the nature of the terms (e.g., RAND or RANDz) on which the Participant is willing to grant licenses.

A. LICENSING COMMITMENT

How a Licensing Commitment Arises

A Participant's Licensing Commitment may arise in various ways. As discussed in detail below, a Participant may be required to undertake a Licensing Commitment when it joins an SDO or a Working Group of an SDO, when it submits a Contribution, or when it submits a Licensing Statement, Some SDOs do not impose any obligation on Participants to make any Licensing Statement or to undertake any Licensing Commitment, although most do impose some form of Licensing Commitment.

Elements of a Licensing Commitment

A Licensing Commitment is not an actual license and generally does not include all of the terms that the Patent Holder may include in the licenses it offers to prospective licensees. The Licensing Commitment may, however, prescribe the general nature of some of the terms and/or prohibit other terms. The terms and conditions not expressly covered by the Licensing Commitment are typically negotiated on a bilateral basis between Patent Holders and Implementers, subject to any overarching requirements in the Licensing Commitment to be "reasonable" and "nondiscriminatory."

While negotiations are often blasteral, in an April 2007 FTC/DOJ Report, Anritrust Enforcement and IP Rights: Promoting Innovation and Competition, the agencies observed that "joint negotiation of licensing terms by standard-setting organization participants before the standard is set can be procompetitive." Such negotiations are unlikely to constitute a per se antitrust violation. The agencies will usually apply a rule of reason analysis when evaluating these joint activities. The FTC/DOJ Report also concludes that, without more, a unilateral announcement of price terms does not violate section 2 of the Sherman Act. The agencies also took "no position as to whether SDOs should engage in joint ex ante discussion of licensing terms."

http://www.ftc.gov/reports/innovation/P040101PromotingInnovationsandCompetitionrpt0704.pdf
The FTC/DOJ Report is consistent with Recommendation No. 20 issued by the Antitrust Modernization Commission in its April 2, 2007 Report and Recommendations (AMC Report) that "Joint negotiations with intellectual property owners by members of a standard-setting organization with respect to royalties prior to the establishment of the standard, without more, should be evaluated under the rule of reason" (one of twelve commissioners dissenting).

http://www.amc/gov/report_recommendation/roc.htm

licensing terms and conditions. Other SDOs require or permit the Licensing Commitment to con-

In some SDOs, the Licensing Commitment is as simple as a commitment to RAND or RAND2

tain some or all of the terms described below, and many SDOs expressly permit the inclusion of

such terms as part of their RAND Licensing Commitment.

1. Terms of the Licensing Commitment Participant shall, [upon request] [1],

grant/offer]

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STANDARDS DEVELOPMENT PATENT POLICY MANUAL

It is important for Participants to understand their Licensing Commitments so that they do not commit to grant more license rights than they intend or become involved with standards development activities that may require them to grant licenses that they did not contemplate. Patent Holders must weigh the potential benefit of fully exercising patent rights against the benefit of promoting the standard, the industry, and their own business prospects. It is equally important for Implementers to understand the range of license terms and conditions they can generally expect Participating Patent Holders to offer. Implementers generally do not want to invest in the development and deployment of standards-based products if they believe that they will not be offered acceptable patent licenses. The SDO, in creating its Policy, must find a satisfactory balance between the interests of the Patent Holders that participate and contribute to the Standard, and the Implementers, whose adoption of the standard is vital for the standard's success.

Some SDOs also require different Licensing Commitments depending on a Participant's level of participation or authority within the SDO. For example, Participants who are part of the SDO's steering committee" or "architecture board" may be required to grant licenses on RAND2 terms, whereas more general Participants may be permitted to grant RAND licenses.

Other Factors

In practice, not all Patent Holders may require Implementers to obtain a license under their Essential Clalms, even if permitted to do so under the Policy or even if they have submitted a Licensing Statement indicating general terms on which licenses may be offered. Such forbearance could, however, impede the Patent Holders' ability to enforce such Essential Claims later under various equitable theories. Moreover, an Implementer who has sufficient awareness of Essential Claims covering an implementation of a Standard could be liable for willful infringement absent a license, and may be at some risk by operating without a license, even if the Patent Holder does not appear to be enforcing its Essential Claims actively. These suppositions have not yet been considered by the courts, however, and Implementers should seek legal advice before taking any such action.

Note that, in some instances, a Participant may be permitted to elect to structure these grants of rights as covenants (similar to that described in Section IV.C.3 below) rather than licenses. Some commentators maintain, however, that a Participant offering a covenant should also offer a license as an alternative to permit bilaterial negotiation. In any case, any such covenant must still meet all of the requirements of the SDO's Licensing Commitment.

An SDO drafting a patent policy and a company joining an SDO should consider how the SDO's policy will affect applicable business and development models of a participating company. For example, the open source software development model has emerged in various standards-serting environments. If a client plans to implement a standard with open source software, counsel should consider the interplay between the open source license commitment the client may have and the SDO commitment it may have. Today there are many open source implementations of RAND-based standards, although the authors are not aware of the circumstances under which these implementations are being gracticed.

RAND)

Similarly, if the SDO wants to attract software developers including open source developers, it may consider the interplay between the respective SDO's commitments, the rights of Patent Holders, open source license commitments, and the incentives to innovate within the scope of the standardization activity. Distributors of all products, including those involving open source software, must also understand that permitted license limitations may affect their ability to distribute products as they might otherwise prefer to do. In addition, the SDO should seek to balance the interests of Implementers (who may rely on differing business models) and the rights of Patent Holders (who may also rely on different business models) in developing its IPR Policy in order to attract a balance of stakeholder interests.

The Licensing Commitment is often stated as an absolute (i.e., that the Participant must grant the required licenses). However, it is resonable to require that such licenses be granted only upon a request by a potential licensee and upon the conclusion of bilateral negotiations. It would be unreasonable for a Participant to be required to seek out its own licensees in this context, or to extend offers before being requested to do so.

[1] The Patent Holder must offer a license to a prospective Implementer upon request. If the adopting the Standard if the Standard has not dard without a license, the Patent Holder may Implementer chooses to implement the Stanchoices: (1) it can discourage the SDO from implement the Standard; or (3) it can imple-Implementer and the Patent Holder do not remedies. The Implementer may rely on any invalidity or noninfringement, and may also license terms did not comply with the SDO's agree on terms, the Implementer has three rely on other legal theories arguing that the Licensing Commitment (e.g., they were not ment the Standard without a license. If the yet been adopted; (2) it can choose not to in turn choose to sue the Implementer for applicable defense to infringement such as patent infringement and seek all available

Unless the Policy states otherwise, it is generally understood that a Patent Holder's obligation to offer a license under a Licensing Commitment is initially discharged after the Participant makes a good-faith offer of such license. If an Implementer refuses the license, it is not clear, however, whether or how often or for how long the Patent Holder must continue to make a license available. On one hand, it may not be reasonable to allow a Patent Holder to refuse a license to an Implementer who previously could not reach agreement with the Patent Holder, but on the other hand an Implementer should not bave the ability to wait until the last minute

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50 STANDARDS DEVELOPMENT PATENT POLICY MANUAL

to demand a license (e.g., in the midst of a patent infringement action brought by the Patent Holder after the Infringer has attempted unsuccessfully to invalidate the relevant patents). An SDO that wishes to avoid disputes regarding these issues may wish to address them explicitly in its Policy.

SDOs must decide who will benefit from the Participants' Licensing Commitments—other Participants, or all Implementers.

to any [Implementer/Participant]

a. licensee(s)

Many SDOs seek to benesit all Implementers of a Standard. This approach is viewed by many to foster widespread adoption of a Standard.

Some SDOs, however, limit Licensing Comminments to other Participants, and Implementers who are not Participants cannot rely on such Licensing Commitments. Such limitations may be imposed because Participants may fear granting licenses to non-Participants that have no Licensing Commitments of their own. These restrictions may also encourage membership in the SDO by attracting Participants who seek licenses under the relevant Essential Claims. This limitation is seen more in "special interest groups" than in "traditional" SDOs.

So long as the Policy permits the Patent Holder to include a reciprocity provision in its license (see Section TVA.2 below), the Patent Holder can obtain a reciprocal license from any non-Participant the Patent Holder chooses to license. Consequently Patent Holders would have an incentive to license both Participants and non-Participants even if the Policy imposes a Licensing Commitment only with respect to Participants. However, absent such a Licensing Commitment, non-Participants are not guaranteed that the Patent Holder will offer any license at all.

If it is anticipated that a Standard may be contributed to another standards organization that does not have this limitation, the SDO, in the Policy, may wish to consider extending the benefit of licenses to all Implementers. Another possibility would be to add a provision that would convert the Licensing Commitment to extend the benefit to all implementers but only in the event that the standard is contributed to such other standards organizations.

b. nonexclusivity

a nonexclusive

c. worldwide

worldwide

d. nontransferable nontransferable/nonassignable

e. duration (perpetual/___-year)

Perhaps the most common term included in a Licensing Commitment is nonexclusivity. The licenses offered by the Patent Holder must be nonexclusive to enable broad implementation of the standard.

Licensing Commitments often require the license to be "worldwide." However, "worldwide" does not necessarily mean that all worldwide rights are licensed under a single license or to each prospective license. Implementers may not want licenses to make, use, sell, etc., the standardized technology throughout the world and may seek licenses for only those regions where the Implementer anticipates practicing the Essential Claims.

Patent Holders may also want to offer different terms for practicing Essential Claims in different regions. This type of strategy, however, may raise questions about reasonableness and nondiscrimination if manufacturers in one jurisdiction are subject to substantially different terms from those in another.

Some SDOs may use the terminology "throughout the world" or "in any country" in the same context. Some Licensing Commitments may permit the Patent Holder to offer licenses that are non-transferable or nonassignable. There may be a number of terms in the license that the Patent Holder believes are material to the license agreement with a specific licensee and therefore the Patent Holder does not want the license to be assigned or transferred without its knowledge and consent. Some licenses that are not transferable or assignable do include limited provisions permitting a license to transfer or assignable with its prior consent.

In a perpetual license, the license of each Essential Claim extends for the life of the applicable patent, unless there is some limiting condition expressed. Implementers often desire a perpetual license because they may not want to invest in a standardized technology believing that the license terms are acceptable, only to find out after the license terminates that the new terms offered by the Patent Holder are not acceptable to the licensee.